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THE SMITHSONIAN
TORCH

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Volunteer Aid: A Boon To SI

By David M. Maxfield

Roll a film of the Smithsonian's decade of development backwards: Gone are the Hirshhorn, the Air and Space Museum, the Renwick Gallery, the Smithsonian magazine and the hundreds of volunteers currently visible to millions of visitors.

The 302,164 hours contributed by 2,348 Smithsonian volunteers in 1979 simply would not have been clocked.

In dollar terms, three groups—the information specialists who staff the desks at the Castle and seven museums, the independent volunteers who assist behind the scenes and the docents—saved the Institution $2 million last year.

Ten years ago, William Grayson of SI Public Affairs—he's now senior telecommunications specialist in the Office of Telecommunications—recognized that changes and growth on the Mall called for a strong, new volunteer network. "People were saying," he recalled, " 'What! The Smithsonian has no information program?' "

Mary Grace Potter, who became Reception Center director in 1971, added that visitor information before the 1970s was limited to racks of brochures in the museums. "There was no central visitors' office," she said, "but, then, the activity level was considerably less than today."

That, of course, was to change. In 1969, Grayson thought it time to take a look at what services were provided and what would be needed as the Institution grew under Secretary Ripley's direction. "About all I found from a quick survey were several ladies at Natural History who were responsible for assigning docents. There was no one to answer questions from the general public, and on top of this, mail from across the country was piling up in Public Affairs and other points around the Institution. There was a need for something."

In January 1970, after an intensive 3-day orientation and considerable planning, the first volunteers were assigned to staff a central information office and five desks at Natural History, Arts and Industries and History and Technology. Many of the 120 pioneers were recruited through the Resident Associate Program and the Natural History docent group.

In the spring, Grayson's central information headquarters moved from A&I to the Castle's Great Hall, a move coinciding with the appearance of the first issue of the Smithsonian magazine and the beginning of the National Associate Membership Program. The move provided a reception center for the visiting Associates, one of the benefits of membership.

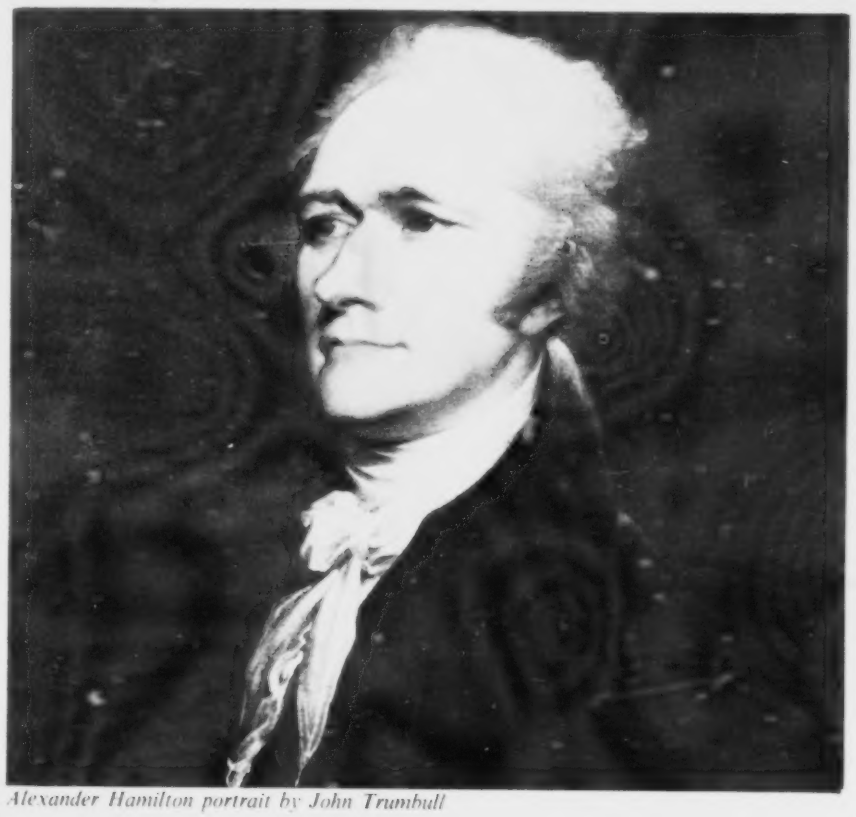
But the Center's furnishings were quite modest in those days—four desks, a manual typewriter and two phones. The typewriter, Grayson remembers, efficiently punched out neat holes instead of the e's and o's on the office memos and correspondence.

The volunteers, according to a recent history of the Reception Center, operated with a three-ring binder containing a little bit of everything, from newspaper clippings to roadmaps and museum leaflets. Each volunteer was made responsible for finding her, or his, own substitute. This included desk coverage on weekends and response to mail from the public and Associates.

In September 1971, Sally Covel, now program manager for the Staff Volunteer Services, became the second Center staff member, followed in October by Potter. In April 1972, weekend information services were brought to a new level of efficiency under the direction of Carolyn Clampitt.

From 1973 to 1976, the Reception Center work volume doubled, then tripled, requiring a staff of eight. This activity also dictated that the Center more sharply define its objectives in relation to the public and members; one result was a change of the

(See 'Volunteers,' Page 2.)



Alexander Hamilton portrait by John Trumbull

NPG Given Federalist Works

Two Federalist portraits, one of Alexander Hamilton by John Trumbull, and the other of Congressman Fisher Ames by Gilbert Stuart, were donated to the National Portrait Gallery in mid-December by the Henry Cabot Lodge family of Massachusetts.

The Hamilton portrait, which was completed in 1806, just a few months after Hamilton was killed by Aaron Burr, was donated by former Ambassador Henry Cabot Lodge. The portrait was acquired originally from the artist by George Cabot, a leading Federalist and advisor to Hamilton.

George C. Lodge, professor at the Harvard Business School and son of the ambassador, donated the Gilbert Stuart portrait of Fisher Ames (1758-1801), a member of Congress and an influential orator. Ames was one of Hamilton's most trusted advisors.

NPG Director Marvin Sadik called the portrait of Hamilton "one of the most important gifts every received by the Gallery" and described the Stuart portrait of Ames as "the most significant work by that artist to have entered our collection thus far."

Both new acquisitions are exhibited on the Gallery's first floor.

NOSE TO NOSE . . . *A four-year-old Anacostia Neighborhood Museum visitor, Sypress Preston, is fascinated by a Nigerian mask in the exhibit, "Out of Africa: From West Africa Kingdoms to Colonization." The exhibit, on view through June, covers early African civilizations, slave trade, the abolitionist movement and the founding of the first African republic.*

Washington Star Photo

Richard Fiske To Head MNH

Dr. Richard S. Fiske has been selected as director of the National Museum of Natural History, Secretary Ripley has announced.

Fiske, 47, a geologist specializing in volcanological studies, is a member of the staff of the Museum's Department of Mineral Sciences.

A native of Baltimore, he holds degrees from Princeton and Johns Hopkins universities. Before coming to the Smithsonian, he directed the U.S. Geological Survey's Office of Geochemistry and Geophysics in Reston, Va., whose 500 staff members carry out earth science research programs.

Ripley, noting that Fiske came to the Institution in September 1976 after serving with distinction at the Geological Survey, said that his "scientific background and his administrative experience, together with his fresh outlook and his knowledge of the Museum, provide a combination of qualities which make him eminently suited" to direct MNH.

At MNH, Fiske's research has taken him to the eastern Caribbean Islands of Guadeloupe and St. Vincent to make on-the-scene studies of major volcanic crises and to the High Sierras of eastern California for studies of ancient volcanic rocks. He is currently chairman of the Museum's exhibits committee and a lecturer for the Smithsonian National Associates' Regional Events Program.

Richard S. Fiske

Energy Goals

The newly established Smithsonian Energy Conservation Task Force has set these bold goals:

- To reduce Smithsonian energy consumption by 10 percent in fiscal 1980 without downgrading any program, exhibit or working condition.
- To develop a 5-year energy management program with yearly goals and special plans and projects to reduce energy consumption.
- To gain the support of all SI personnel in contributing to energy conservation.

The objectives were outlined by chairman Tom Peyton Nov. 29 at the task force's initial meeting, which was attended by Secretary Ripley, Under Secretary Michael Collins and John Jameson, assistant secretary for administration.

The Secretary expressed confidence that SI staff members would cooperate in the conservation quest in order to assure that the energy crisis and spiraling costs would not impair the scope and quality of Smithsonian programs and research. Last year, Ripley pointed out, $1 million had to be taken from current programs to pay for a 6 percent increase in electrical consumption coupled with a 12 percent increase in rates.

The 22-member task force, representing a broad range of SI activities and organizations, heard Ken Shaw, of the Office of Plant Services, report that the fiscal 1979 energy conservation measures—identifying and correcting sources of wasted energy, modifying building systems where necessary, evaluating the patterns of energy use across the Institution—resulted in cost savings of $500,000. Nonetheless, Shaw noted, total energy costs increased by $900,000 between fiscal 1977 and 1979.

(See 'Energy,' Page 2.)

'Energy'

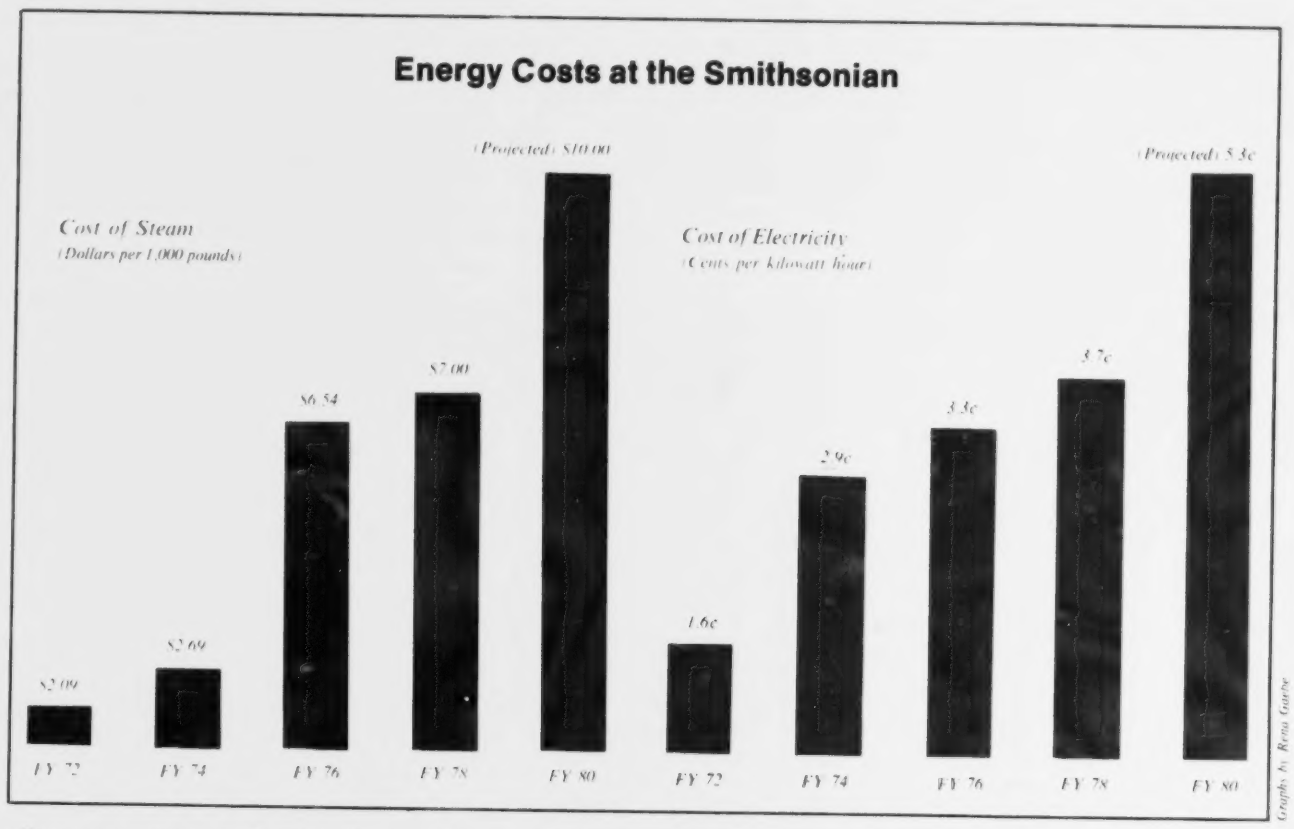
(Continued from Page 1)

Figures supplied to the task force for those 2 years showed the urgent need for further conservation:

Use of steam for heating of 13 buildings dropped by 4 percent in that period, from 273 to 262 million pounds, but costs increased by 21 percent, from $1.9 million to $2.3 million. In the same period, electricity usage rose 1 percent, from 87.6 to 88.4 million kilowatt hours, while costs jumped 11 percent, from $3.5 million to $3.9 million.

Areas to be studied by the task force in its search to make savings without reducing standards include laboratories, libraries, exhibits, craft shops, collections, museum shops and cafeterias, transportation and buildings systems. The task force will examine lighting, heating, ventilation, car pools, shuttle service, motor vehicle usage, hours of operation of escalators, hours of custodial work, water heating, equipment monitoring, water conservation and building insulation. It will seek suggestions from staffers as to other areas of possible energy savings.

Task force representatives and their assignments are: Don Dormstetter, Facilities Planning and Engineering Services; Arun Vohra, OPlantS; Richard Friedman, Public Affairs; Tom Peyton, Ken Shaw, Fran Rooney, Budget; David Lellinger, Eleanor McMillan, Laboratories; Katherine Eirk, Libraries; Ed Robinson, Phillip Anderson, Exhibits; Jim Mahoney, Ken Shaw, Shops; Monroe Fabian, John Hoffman, Collections; Mel Zisfein, Don Wilhelm, Nancy Kirkpatrick, Bureaus and Major Offices; Jay Chambers, Protection Services; Ohlen Boyd, Museum Shops and Cafeterias; Joe Davisson, Don Dormstetter, Building Managers; John Moreci, Transportation; George Calise, Arun Vohra, Building Systems.



Graphs by Rena Gurbe

Senate of Scientists Speaks Up for Research

By Thomas Harney

Dr. J. W. Pierce, a paleobiologist at the Museum of Natural History, has assumed office as the 1979-1980 chairman of MNH's Senate of Scientists. Dr. Herman Viola, MNH anthropologist, was named chairman-elect, and will assume the chairmanship next year.

The chairman and the chairman-elect annually relinquish a considerable amount of their research time in order to represent the Senate membership, carrying the members' views on matters relating to science and professionalism into administrative offices both within the Museum and the Smithsonian at large.

Currently, the Senate has 109 full members from the Museum's professional scientific staff and 45 associate members, consisting of scientists collaborating with MNH staffers and those working in the Museum with tenant federal agencies.

Heading the Senate's agenda of concerns for the past 6 months has been the search for a new MNH director. In the year ahead, the two scientists plan to hold a series of meetings with key SI administrators to improve their organization's working relationship with the Castle.

The Senate also elects a secretary, a post currently held by Dr. David Pawson, and a treasurer, currently Viola. There is a standing Senate executive Council made up of a representative from each of the Museum's seven departments and the Director's Office. Current Council representatives, each serving a 2-year term, are: Bruce Smith, Anthropology; Dan H. Nicholson, Botany; Richard C. Froeschner, Entomology; Joseph Rosewater, Invertebrate Zoology; Tom Simkin, Mineral Sciences; Richard Grant, Paleobiology; George Watson, Vertebrate Zoology, and Gordon L. Hendler, Office of the Director.

Herman Viola (left) and J. W. Pierce, new Senate of Scientists leaders

Two standing committees are maintained by the Senate: A finance committee is currently reviewing the earnings record of the Smithsonian's trust funds, and a committee on administrative problems has recently completed a critical examination of the new Smithsonian parking fee structure.

At present, there are two ad hoc committees: One of these is revising the guidelines for research award allocations (to go into effect if and when Congress renews funding of the Research Awards Program), and another is evaluating the criteria set up for the selection of Fellowship Program awards.

The Senate holds several dinner meetings each year to enable scientists in the various departments to maintain contact and to inform them about research in related fields. At such a meeting in late November, Dr. J. Lawrence Angel, curator of physical anthropology, discussed his work in forensic medicine in a talk titled "Bringing Skeletons to Life."

The Senate also holds seminars from time to time and occasionally honors outstanding scientists with its International Award for Distinguished Contributions to Natural History. Dr. George Gaylord Simpson, one of the outstanding paleontologists and evolutionary theorists of the 20th century, received the award in 1976.

Museum Names Deputy Director

Douglas Evelyn has been appointed deputy director of the Museum of History and Technology effective Jan. 1.

Evelyn has been with the National Portrait Gallery for the past 10 years, most recently as deputy director.

Richard Howcroft

"Working at the Portrait Gallery during its formative years and under Marvin Sadik," Evelyn said, "has given me a unique opportunity to learn and apply professional museum skills. The rich collections and staff resources of the Museum of History and Technology present me with an opportunity to work in another bureau concerned with American history. I'm anxious to contribute to its success in any way I can."

A graduate of Wesleyan University, Evelyn has pursued graduate studies in art history at Howard University and George Washington University. He is currently completing a book on the 19th-century architectural and social history of the Patent Office Building which houses NPG and the National Collection of Fine Arts.

Evelyn has also been an education consultant for Monroe Bush & Associates and is a former staff member of the American Association of Museums.

A resident of Washington since 1963, he is on the executive committee of the Cultural Alliance of Greater Washington, treasurer of the AAM and a long-time member of the Choral Arts Society of Washington.

'Volunteers'

(Continued from Page 1)

name to the Visitor Information and Associates' Reception Center.

In setting up the original volunteer program, Grayson thought it essential to require each information specialist to work a minimum of 3 definite assigned hours a week, a standard precluding the "overzealous from signing up for everything and then dropping out." Training also began; it now amounts to 36 hours over a 4-week period for information specialists.

"The volunteer programs are one of the Smithsonian's richest assets," Potter said. "These people are here because they want to be. They're people dealing with and interested in people. You can never replace that personal touch."

Today's volunteers come to the Institution for numerous reasons, according to Potter. Some have retired but want to pursue some interest they had never before seemed to find the time for. Other hold 40-hour-a-week jobs but serve as volunteers, too, simply because they believe in public service. Some need the contact with others following a personal crisis or hardship, and still others are women who view the volunteer work as "a bridge back into the professional mainstream."

In 1979, the bureau docents—884 persons—contributed 100,487 hours guiding thousands of visitors through Smithsonian exhibits. The Independent Volunteer Placement Service—470 men and women under Covel's direction—worked 80,814 hours behind the scenes with the Smithsonian professional staff, and the 280 information volunteers contributed 36,099 hours.

Auxiliary volunteers were active at the Zoo (355 persons; 36,426 hours), the Folklife Program (59; 5,500), Insect Zoo (118; 17,000), Resident Associate Program (80; 9,688), Women's Committee (46 volunteers), Chesapeake Bay Center for Environmental Studies (14; 1,000) and the Cooper-Hewitt Museum in New York City (42; 12,150).

Radio Smithsonian

Broadcast on WGMS-AM (570) and WGMS-FM (103.5) Sundays at 9 p.m.

Jan. 6 "Faster than Sound"—The first man to travel faster than sound looks back at his career as a jet pilot; and "Off the Pedestal"—The story behind the Women's Pavilion at the 1893 World's Columbian Exposition.

Jan. 13 "'Radio Smithsonian': The First 10 Years."

Jan. 20 "An Art of Parody?"—The work of Fernando Botero; and "Local is Beautiful"—New ways for cities to achieve energy self-sufficiency.

Jan. 27 "The Eye of Eliot Porter"; and "Rugs for Your Walls," a new traveling exhibition of ryijy rugs from Finland.

Feb. 3 "All About Edith"—A conversation with designer Edith Head; and "Journey into Northern China," with NASM's Farouk El-Baz.

Exhibit Design at the Smithsonian

Taking the Smithsonian On The Road

By Linda St. Thomas

Designing an exhibit to fit into a museum is one thing. Preparing a show that will travel for at least a year to as many as 10 locations around the country is quite another.

Designers in the Office of Exhibits Central, headed by James Mahoney, put together at least 20 major exhibits a year for the Smithsonian Institution Traveling Exhibition Service. The shows are destined for all kinds of galleries and museums, so they must be flexible enough to be shipped easily, sturdy enough to withstand some rough treatment at loading docks and inexpensive enough to be economically feasible for small museums and historical societies.

"We don't have the freedom or the control that designers normally have over their exhibits," Mahoney said, "because we don't know, for example, what kind of lighting will be used, how cases will be arranged or even what the size of the exhibit area will be."

However, every exhibition leaves the Smithsonian's shop with installation instructions, either a checklist or a detailed display plan, for the designers at the other end.

The exhibits range from simple photographic panels to rare artifacts and paintings that arrive at a museum in climate-controlled vans. Among the largest shows distributed last year was "Played with Immense Success: Louisiana Music 1840-1940," scheduled to open this month at the Kennedy Center.

How these exhibits are prepared for shipping is a design and construction feat in itself. The standard wooden shipping crates would never do, Mahoney noted, because they are not strong enough and the insides are not padded.

Over the years (Exhibits Central started designing SITES shows in the early 1970s), the cabinet shop staffers kept modifying shipping crates until they came up with a "style" that was just right. The crates are so rugged, in fact, that they always outlive the exhibits. A show may be booked for a year, but the crates come back to the Smithsonian and are re-cycled for a good 10 years.

Each crate is made to order with foam strips on the inside to protect the contents and plenty of space along the edges for sliding the exhibit cases out.

The crates are all painted a shocking "SITES yellow" and stenciled with the international symbols for Fragile, This end up, Use no hooks or Don't leave out in the rain.

"We can put together a simple crate now in about 3 hours, as long as it doesn't need a lot of interior work," Ken Clevinger, cabinet shop supervisor, said. "Our nine-man staff sometimes puts out 60 crates a month in addition to exhibit cases and other things."

The cabinet shop is still making changes in the cases. Not long ago, shop staffers started to round the corners so they wouldn't catch so easily. The idea, Clevinger says, is to design cases so that there's nothing left to chance when they're handled by the shippers.

Fragile artifacts are often permanently installed in their own cases, which are then placed in the packing crates. Whether the object is a woodcut, print or gem, it can't be bouncing around the exhibit case as it's trucked across the country. Special felt-tipped braces and brackets are designed to fasten the artifact in place and the case front is made with lexan, an unbreakable plastic used nowadays for school windows.

A recent exhibition that has a bit of everything, from photos to watercolors to dolls, was "The Year of the Hopi," a look at the ceremonies, dances and customs of the American Hopi Indians which opened last September in Phoenix and is still traveling around the country. The 64 photos, which had been shot by artist Joseph Mora in the early 1900s just before cameras were banned from the tribe's public dances, were mounted, and the Kachina dolls, representing ceremonial rain dancers, were permanently fastened in place in their cases. The watercolors were individually framed behind ultraviolet filtering plexiglass.

Budgets and deadlines plague most everyone, but for designers of traveling exhibitions they can become critical considerations. In order to meet the booking dates, every show must be ready for shipping at least 10 days ahead; near holiday times, 3 weeks are allowed for delivery. Unlike other Smithsonian exhibits, the exhibits installed in other museums cannot be changed once they open. The budgets are more modest than those for similar displays here in our Washington museums because SITES uses lighter materials and keeps the shows smaller.

More than 150 shows are on the road at any one time. To keep up with that pace, Exhibits Central always has at least 5 exhibits in the works simultaneously at their 1111 North Capitol Street shop, and that doesn't include the refurbishing of exhibits that have come back to the Smithsonian.

Last in a series.

Crated SITES exhibits await their next engagement.

Richard Hafmeister

Look For . . .

Dr. Bernard Finn, curator of electricity at MHT, will appear in a 1-hour special, "Legacy of Genius: The Story of Thomas Alva Edison," airing on Channel 26, Thursday, Jan. 10, at 9 p.m. Narrator Eric Sevareid interviewed Finn in MHT's Edison exhibit for the special, which looks at Edison's accomplishments, their impact on the world and the future for tomorrow's inventors.

Books

"The American Land," a 228-page book examining the American environment, past, present and future, is the fifth publication by Smithsonian Exposition Books.

With more than 350 photographs, paintings and drawings, most in color, the book contains some 30 chapters written by specialists who explore America's villages and cities, its open spaces and farmlands as well as the traditions of such inhabitants as Indian mound builders and Basque sheepherders.

The book, divided into six major sections, sells for $21.95 and is available in bookstores across the country and in Smithsonian museum shops. As of the beginning of December, approximately 52,000 copies had been sold through trade and mail distribution.

A major feature of "Every Four Years: The American Presidency," the next publication by Exposition Books, will be an 18-page panoramic fold-out photograph of political campaign items from a special display in the Museum of History and Technology's "We the People" exhibition.

The book, which will be available in April, includes essays written by outside contributors and Smithsonian historians and curators plus colorfully illustrated articles on the Smithsonian's numerous collections and programs in the area of the American presidency.

The Washington Star's list of recommended yuletide gift books included three SI-linked works: "The National Air and Space Museum," by C.D.B. Bryan, "A Zoo for All Seasons," Smithsonian Exposition Books, and "Rain Forests and Cloud Forests," with photographs by Kjell B. Sandved, MNH.

Following are recently published books by Smithsonian staff and SI Press. "Threads of History: Americana Recorded on Cloth—1775 to the Present," by Herbert Collins, MHT; SI Press, 1979.

"Pollution Ecology of Estuarine Invertebrates," co-editor and contributor C. W. Hart Jr., MNH; also contributing, Dabney Hart, J. Laurens Barnard, MNH, and Austin B. Williams, National Marine Fisheries Services at MNH, Academic Press, 1979.

"Arts in America: A Bibliography," (Vol. I and Index Vol.), Bernard Karpel, editor; SI Press, 1979.

"Europe 1980," with chapters on Leningrad and Moscow by Martina Norelli, NCFA; Houghton Mifflin Co., 1979.

"The Natural Man Observed: A Study of Catlin's Indian Gallery," William H. Truettner, NCFA; SI Press, 1979.

"The P-80 Shooting Star: Evolution of a Jet Fighter," E. T. Wooldridge Jr., NASM; SI Press, 1979.—*Johnnie Douthis*

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Published for Smithsonian Institution personnel by the Office of Public Affairs: *Alvin Rosenfeld*, Director; *Susan Bliss*, Editor; *Kathryn Lindeman*, Editorial Assistant.

Joseph Mora's early photograph of a sacred Hopi dance, part of the SITES exhibit, "The Year of the Hopi." Mora took the photo in the early 1900s just before cameras were banned from the Hopi public dances.

Diana Davies

Roland L. Freeman

Photographs from the MHT exhibition: (Top) rally in New York City, April 1968. The words are Martin Luther King's. (Below) mule train leaving Mississippi and heading for Reform, Ala., during Poor People's Campaign, May 28, 1968.

Cultural Echoes of Civil Rights

By Jill Cohen

Civil rights movement activitists and scholars will gather at the Museum of History and Technology Jan. 30-Feb. 3 for a 5-day working conference commemorating the 20th anniversary of the first civil rights sit-ins in Greensboro, N.C.

The conference, "Voices of the Civil Rights Movement," is the climax of a year-long study by the Program in Black American Culture of the Division of Performing Arts. Conference participants will explore and analyze the cultural aspects of the civil rights movement. Conference components will include a 5-day songleaders' workshop, a 3-day colloquium and "We'll Never Turn Back," an exhibition of works by 13 civil rights movement photographers.

In addition, the Program in Black American Culture is producing an archival set of three records entitled "Voices of the Civil Rights Movement: Black American Freedom Songs, 1960-1966." A book, based in part on conference research, will follow.

Dr. Bernice Johnson Reagon, director of the Program and convener of the conference, attributes her fascination with black cultural history to her involvement with the civil rights movement in Albany, Ga., in the mid-1960s: "My experience with music and culture and change during the civil rights movement directed me to become a cultural historian." Her interest in black oral history and oral tradition sparked the songleaders' workshop, the first formal gathering of its kind.

The songleaders' workshop will explore the role of music in creating and maintaining the energy of the movement—from lifting the spirits of a tired crowd to verbalizing the political goals of the crusade for civil rights. As part of the songleaders' workshop, songs will be re-created, studied, documented and performed in three public concerts to celebrate the courage and spirit of the civil rights movement.

Among the participants will be community-based songleaders as well as such noted ensembles as the Student Nonviolent Coordinating Committee Freedom Singers, Jimmy Collier and the Movement Singers and members of the Congress on Racial Equality Freedom Singers, the Montgomery Trio and the Nashville Quartet. "This is the first time these songleaders have come together," Reagon notes, "to discuss the effect their songs had on the morale of civil rights movement participants and on the nature of the movement itself."

During the 3-day colloquium, panelists Ella Baker, Julian Bond, Rev. Wyatt Tee Walker and professor Howard Zinn, among others, will review the written, oral and visual record of the movement and analyze its basis in black oral tradition.

The MHT photography exhibit will, for the first time, combine in one comprehensive display the visual statements of 13 photographers who worked full-time to document the civil rights movement. The exhibition will open on Feb. 1, 20 years to the day after the first Greensboro sit-in.

"Voices of the Civil Rights Movement" is co-sponsored by the Smithsonian and Howard University. It is funded by the Smithsonian and by a grant from the National Edowment for the Humanities to Howard University.

Jessie Cohen

A family of horned oryx, subjects of the Zoo study

Zoo Studies Inbreeding Risks

By Madeleine Jacobs

Researchers at the National Zoo have published a major study that confirms the serious consequences of the common practice of inbreeding among small groups of hoofed animals in zoos and conservation parks.

In 15 of 16 hoofed species investigated, the researchers found that the offspring of inbred animals in small captive herds had a significantly higher death rate in the first 6 months of life than the offspring of non-related parents.

"The study has major implications, not only for the management of zoo breeding programs," says Dr. Katherine Ralls, the zoologist who directed the study, "but also for conservation and wildlife specialists who are responsible for managing small populations of hoofed species in reserves and in areas where species have been introduced back into their natural habitats."

The problems of inbreeding are not new, Ralls says. In fact, they are well-documented, and it might even seem like common sense that breeding among related animals could cause problems.

But many zoos have not kept and analyzed records. On large reserves, it is often hard to document parentage of animals. These factors have made it difficult to prove a link between mortality of offspring and inbreeding in a wide variety of exotic animals.

The National Zoo has kept detailed records noting parentage, number of births, deaths and cause of death for nearly 12 years (20 years in some cases). Ralls, assisted by Kristin Brugger and Jonathan Ballou, analyzed these records. Additional data came from several other zoos. The Smithsonian's Fluid Research Fund and the Friends of the National Zoo provided financial support for the study.

The species studied were the Indian elephant, zebra, pygmy hippopotamus, giraffe, four species of deer and eight species of antelope. For each of these species, except the kudu (a type of antelope), the mortality of offspring from related parents was higher than that of offspring from non-related parents.

Based on these findings, Ralls says, there should be more exchanges of non-related animals between zoos for breeding purposes, and zoos should keep and analyze detailed records of mating, births and deaths.

SI in the Media

By Johnnie Douthis

"Empire builder," "brilliant," "conspicuously successful keeper of the nation's attic," were among the phrases used to describe Secretary **S. Dillon Ripley,** the subject of the December cover story in Washingtonian magazine. The lengthy, illustrated article dealt with the Secretary's background, his experiences as an ornithologist and his numerous achievements as Smithsonian Secretary.

Abram Lerner, director of HMSG, was the subject of an in-depth article by art critic Benjamin Forgey in the Washington Star. The lengthy profile focused on Lerner's long association with Joseph Hirshhorn and his work in making HMSG a "major national institution."

Smithsonian News Service

Large and small newspapers across the country utilized art and science stories contained in the first monthly offering from the Smithsonian News Service (see October Torch). The San Francisco Examiner, for example, carried the story on dolphins by **Thomas Harney,** MNH public information officer. An article on modern art, by Hirshhorn's **Sidney Lawrence,** appeared in newspapers in California, North Carolina and Kansas. "Recycled Buildings Find New Lives," by public affairs staffer **David Maxfield,** was picked up by weekly as well as daily newspapers. "Studies of Mars Reveal Earthly Secrets," by science writer **Madeleine Jacobs,** was not only widely used as is but was also adapted into editorials by the Aiken (S.C.) Standard and the Battle Creek (Mich.) Enquirer & News.

George and Martha

An Associated Press story carried by the Washington Post and the New York Times reported that fundraisers have failed thus far in their efforts to collect $5 million to keep Gilbert Stuart's portraits of George and Martha Washington in Boston. However, Gen. James M. Gavin, who heads the effort, was quoted as saying the shortfall does not necessarily mean that the portraits will be sold to NPG.

Live Performances

The Washington Star carried a backgrounder on the Art Ensemble of Chicago, in town recently to give a DPA concert. Jazz writer Tim Warren said the group "ranks high as a model of historical consciousness, ambition and creativity."

Pinpointing Portraiture

The Washington Post wrote that Colette Yglesias' interpretation of Isadora Duncan at NPG "captured the sincerity, womanliness and chasteness that is a large part of what we associate with Duncan."

A Christian Science Monitor writer said: "A stroll through the National Portrait Gallery is like a brief encounter with people you've always wanted to know."

Art

The Washington Post and the Las Vegas Review Journal noted the 25th anniversary of the Archives of American Art with articles on AAA's history and collections as well as its acquisition methods.

Both local dailies covered the Freer's "A Decade of Discovery" show with articles describing the exhibit's contents and discussing the Freer's collection policy.

People

The National Geographic carried an extensive article on deserts written as a result of the author's travels with **Farouk El-Baz,** research director of NASM's Center for Earth and Planetary Studies.

Other SI staff who were the subjects of recent articles: CFA Director **George B. Field,** in Star and Sky magazine; MHT Senior Curator **C. Malcolm Watkins,** in the Washington Post; **Donald R. McClelland,** coordinator of the lending program at NCFA/Renwick, in the Troy (Mich.) Eccentric; Smithsonian MHT Education Coordinator **Alice Malone,** in Newsweek magazine, and CFA's **John P. Huchra** and MNH research associate **Betty Meggers,** in the New York Times.

Smithsonian staffers whose writings have appeared recently include: NPG Historian **Marc Pachter** in the Washington Post Book World and MNH volcanologist **Richard S. Fiske** in England's Nature magazine.

READEX FICHE

THE SMITHSONIAN
TORCH

Special | The Smithsonian Institution, Washington, D.C. | January 1980

In Honor Of Our Volunteers

The Smithsonian community deeply mourns the passing of Gloria Dean Whipple, an active volunteer with the Resident Associate Program, who died in George Washington University Hospital on Oct. 5 of injuries suffered when she was attacked while returning home after serving as a volunteer monitor at an RAP class.

Secretary

SPECIAL ASSISTANT TO THE SECRETARY
Office of Curator, SI Building
Imogene Baumgardner
Roberta Downes — Constance Minkin
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Kenneth Puckett and interpreter at the Hirshhorn

Deaf Aide Guides Deaf Visitors

By Kathryn Lindeman

Kenneth Puckett is an art history major. Ken Puckett is also deaf.

His skills in communicating with other deaf people and his knowledge and interest in art make him an ideal choice to lead tours for deaf visitors through the Hirshhorn Museum.

"This is the first time we've been able to plan tours in the Hirshhorn for deaf people," the Museum's Education Department chief, Edward P. Lawson, said. "Ken has the built-in capacity to guide these tours because of his knowledge of signing and lip reading."

Puckett, who has lost 95 percent of his hearing, began wearing a hearing aid at the age of 2 years. The device, he said, helped in his training and auditory discrimination by amplifying the small amount of sound he could hear.

With his interpreter, he attended docent training classes at the Museum from September through December. "Ken juggled his courses around," Lawson said, "to make sure he got to docent training 2 hours each week."

Puckett, a student at Gallaudet College in the District and a native of West Memphis, Ark., will receive college credits for his work at the Museum in an off-campus program. However, to Puckett, the main reason for volunteering his time to guiding museum tours is: "I'll learn by doing and being involved, and it will make my interest in the history of art more realistic."

"I enjoy advising the deaf and educating them about their rights," Puckett said, "as well as informing the hearing world about the skills and possibilities of deaf people.

"I hope to alert the deaf community that my services are available here at the Museum." Puckett plans to use Gallaudet publications, videotape series and other vehicles to reach those interested.

The times and content of the tours have not been set yet, Lawson said. "We have to determine the demand first. The Hirshhorn offers general tours to walk-in visitors three times a day, Monday through Saturday. Ken could conduct such tours, scheduled on a regular basis for any day on which he would be available. But we may also have groups calling up for special tours covering certain aspects of the collection. Ken can take about 20-25 people in such a group."

In training sessions, the docents, who first are assigned required background reading, are taught about specific paintings and sculpture in the Museum and about tour techniques. Lectures and discussions on the Museum itself, the collecting activities of Joseph Hirshhorn and the aesthetics of modern art are also part of the course. "It takes skill and training," Lawson noted, "to mold a general tour group into a cohesive unit in 1 hour and to give them a meaningful and enjoyable introduction to art of the 20th century."

Disguised As A Volunteer . . .

By Linda St. Thomas

What do you say to the young woman who barely speaks English but wants to meet an oceanographer in the Museum of Natural History? Or to the person who wants to borrow the film, "To Fly?" Or to the 20 kids and their teacher, all toting brown bag lunches, who want to know where they can eat?

I spent part of a wintry Friday in December disguised as an information volunteer in two of the most popular museums on the Mall, Natural History and Air and Space. At each desk, I joined the regular volunteers as they handled the endless stream of questions, problems and minor crises of Smithsonian tourists.

Since the authentic volunteers told me it was a "quiet" day at both museums, I guess it must be normal for a group of 90 fourth-graders to converge in the MNH rotunda or for a group of young girls, chanting rib-bit, rib-bit, to hop around the floor like frogs.

But that's nothing compared to days during Tourist Prime Times in cherry blossom season, Easter week and the week between Christmas and New Year's.

The morning I showed up for duty, information volunteers Janet Lublin and Lorna Sneddon in NASM were still recovering from the Friday after Thanksgiving, traditionally the busiest single day of the year at all Smithsonian museums. By that afternoon, Janet recalled with a grimace, the visitors had formed several lines around the desk. Four volunteers could barely keep up with the crowds, who needed to know everything from the location of bathrooms and the cafeteria to the name of the first pilot to break the sound barrier.

"The first rule for anyone working at an information desk is to keep your responses brief," said Juliet Lohr, who's been at the MNH Mall desk for 4 years. I had started the morning naively believing that, if people took the trouble to ask a question at the information desk, then they wanted to know the answer. I was wrong.

If my response took more than 5 seconds, I would be talking to the back of a head because the inquisitive visitor was strolling around near the elephant by the time I began the second sentence. Julie told me not to be depressed. "It's nothing personal," she assured me. "It happens all the time."

(See 'At the Desks,' Page 7.)

Decorative Arts
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Muffi Galban — Jan Seiter
Minna Hirsch — Marilyn Vogel
Robert Ibberson — Piera Watkins
Rita Kramer — Joy Wolf
Emily Roche

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Helen Beeley — Sylvan Margulies
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Dorothy Davis — Terese Milbauer
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Sabina Gatheral — Dorothy Osserman
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Edith Kenner — Helen Stanbury
Mary Kerr — Margareta Wille
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HIRSHHORN MUSEUM AND SCULPTURE GARDEN

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Betsy Applebaum — Lynn Fondahn
Nancy Barnum — Gertrude Friedman
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Alice Bindeman — Lillian Greenspan
Margaret Blee — Arlene Hoebel
Frances Burka — Joclare Holmes
Lenora Burstein — Reba Immergut
Pauline Cohen — Ann Jacoby
Dorothy Colban — Laine Katz
Annie Belle Daisey — Lynne Kauffman
Loretta Keller — Jane Rodman
Joan Kirsch — Loretta Rosenthal
Lillian Lafont — Jeanne Ross
Judith Landau — Diane Schachner
Isabel Langsdorf — Irene Schiffman
Dorothy Lapadula — Sandra Schwalb
Blanche Levenberg — Sally Seidman
Harold Levine — Helen Shumate
Janet Levine — Muriel Sirken
Lynne Loube — Irmelle Small
Frances McElroy — Lillian Smith
Doris Miller — Martha Jane Smith
Dorothy Miller — Maureen Steinbach
Missy Millikan — Elaine Steinmetz
Claire Monderer — Betty Sterling
Shirley Olman — Ruth Taylor
Pat Olson — Barbara Tempchin
Ruth Oviatt — Jessie Tromberg
Mary Patton — Marilyn Tublin
Elaine Pew — Virginia Turman
Vivian Pollock — Pete Wheeler
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MUSEUM OF AFRICAN ART
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Gail Brooks — Jack Koteen
Ann Carter — Joanna Lee
Terese Critzer — Doris Ligon
Shirley Dickey — Phoebe McPherson
Susan Donnelly — Molly Martin
Henry Elliott — Susan Morris
Mona Gavigan — Gwen Nix
Mary Ann Gill — Phillip Oliver
Annette Gilliam — Barbara Orden
Susan Goldberg — Frank Lee Peterson
Adrienne Gyongy — Maxine Phillips
Shirley Hamburg — Dorothy Sands
Mary Houdek — Carolyn Schirmer
Sylvia Johnson — Mary Kay Schoen
Wyneva Johnson — Ida Smith
Edna Jones — Shirley Thompson
William Jones — Charlene Ward
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Rebecca Anderson — Charles Drake-Long
Gail Armstrong — Jeanne Dubendorf
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Lee Clark — Jan Gilka
Lynn Conover — Valerie Goodwin
Pat Cooper — Edward Gottsman
Barbara Council — Natalie Grimes
Juanita Cribb — Marieta Harper
Libby Cullen — Adalyne Hart
Djodi Deutsch — Michelle Hoyte
Sylvia de Vaivre — Ann Hunter
Marilyn Dickie — Charessa Jackson

Cam Fink prepares her slides.

Covering SI In a Half-Hour

If you talk fast enough and just pick the highlights of each building, you can actually cover the Smithsonian museums in Washington in 30 minutes. Every day at 2 p.m. (except Sundays), a volunteer presents such a 30-minute orientation course for groups of Associates who are beginning their tours of the Mall.

Any groups of 10 or more persons (over age 16) can set up a similar orientation session with a volunteer specially chosen by the Visitor Information and Associates' Reception Center for his or her speaking abilities and knowledge of the museums.

On a recent Friday afternoon, volunteer Cam Fink, who has been in the orientation program since it started last spring, spoke to a small group of Associates visiting Washington for a weekend. A 25-minute slide show illustrated her talk with views of every building, a few of the most popular artifacts and, of course, the giant pandas at the Zoo.

After giving a brief history of the Institution, Fink described the buildings and their collections, one by one, beginning with the National Air and Space Museum. She even included such tidbits as "Don't bother looking for the front window in Lindbergh's Spirit of St. Louis—he didn't have one," and, "The reason it's so dark in the First Ladies Hall is so that light won't damage the fabric in the old dresses."

Program Coordinator Jennifer Williams said the group orientations are usually held in the Museum of Natural History's Ecology Theater. If the crowd is too big, the program is given in one of the Smithsonian auditoriums.

If a group is particularly interested in a certain collection at the Smithsonian, in a single museum, in modern art or in technology, its members will get an orientation program tailored to their interests.

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Alison Kern
Harriet Koch
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Binny Levine
Maureen Lewis
Morris Licht
Ellen McCafferty
Aundra McCoy
Frank McCoy
Sheila McGurk
Hermenia McLaurin
Martha Molmud
Lela Moore
Cora Moorhead
Sarah Morton
Robin Murray
Cherryl Neill
Cecelia Pauli
Mavis Payton
Lisa Ray
Betty Robinson
Karen Ronald
Mason Schaefer
Carol Settles
Jane Shaw
Linda Smith
Habieba Snow
Carol Sylvester
Diana Talbert
Jay Thompson
Gwendolyn Walker
Judith Ware
Wilemena Ware
Elnora Williams
Etta Wilson
Edmere Winfield

NATIONAL COLLECTION OF FINE ARTS

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Sophie Danish
Margo del Vecchio
Leslie Ann Kase
Marie McCarthy
Edith Peters
Stephanie Rich
Amy Thompson
Elizabeth Weldon

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Elizabeth Adams
Lois Berger
Grace Berman
Barbara Booth
Sherry Bortnick
Estelle Bossin
Jean Brackett
Pauline Cohen
Harryette Cohn
Dorothy Colban
Sophie Danish
Bernice Degler
Jane Eddy
Marcia Edenbaum
Fifi Edison
Velma Galblum
Florence Gang
Ellen Glassman
Lilyan Goda
Marian Goozh
Selma Gratz
Lillian Greenspan
Smoot Harris
Lilly Hiller
Marion Holtz
Judith Houston
Ann Jones
Susanne Joyner
Jeanette Kear
Barbara Kenner
Mary Amm Kirk
Phoebe Kline
Elizabeth Kramer
Gertrude Landay
Vira Ludlow
Margaret MacElfatrick
Marjorie Matthews
Marjorie McMann
Lillian Mones
Sylvia Nazdin
Ruth Oviatt
Lillian Pharr
Peggy Ritzenberg
Loretta Rosenthal
Sylvia Rosenthal
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Marnie Tobriner
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Gloria Feeney
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Orrin Long
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Desta McDowell
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*Hugh Pettis
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Lena Jurand
Charles Looney
Louise Marty
Laura Matthews
Margaret McComb
Anne Miller
Jan Moeller
Anna Noll
Helen Pao
Norma Papish
Richard Philbrick
Pamela Reardon
Dixie Rettig
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Peggy Boinis
Peg Breeden
Kathy Campoli
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Jacque Cocheres
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Ruth Furey
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Lotte Lukinson
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Linda Nichols
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Bernice Rashish
Sue Reed
Mary Jo Relic
Virginia Sandifer
Edythe Shepsle

For the Sake Of Birds and Children

Take away the volunteers and there probably wouldn't be any SEED at the Chesapeake Bay Center for Environmental Studies. SEED, or Smithsonian Environmental Education Day, as it is more formally known, is a semi-annual event that, after 4 years in operation, has produced sufficient revenue to benefit local school children as well as area birds.

SEED started out as a simple way to sell high quality winter feed for wild birds while raising funds for CBCES education programs. Volunteer efforts have made it possible to expand the original order-and-pickup schedule of SEED into a day filled with tours, expert ornithological advice and sales of field guides and bird-feeders and houses. Last fall, SEED docents offered the first tour of migrating bird nesting sites at CBCES.

SEED docents bring a range of professional and personal interests to their volunteer service. Harry Proctor, for example, is a mechanical engineer. Harry Oehler is an electrical engineer. Last fall, together with environmental specialist Mary Ann Keicher and former administrative aide Barbara Oehler, they "engineered" the processing and packaging of a tractor trailer load of 125,000 pounds of wild-bird food mix, sunflower seed, cracked corn and finer feed, which was snatched up by 370 happy customers.

Checking the orders and collecting payments were four long-time CBCES docents: Katherine Griffith, a retired teacher who taught several of the staff's children; medical technician Christine Simpson, retired social worker Mary Moerschell and naval officer Russell Moerschell.

Harold Wierenga and George Hardesty are in their second year of sharing their knowledge of bird identification, food preferences and habits with buyers. Wierenga regularly leads bird walks in Metropolitan Washington. Hardesty, a retired Navy inventor, does double duty as the unofficial SEED photographer.

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E.A. Stonesifer
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Cathie Titus
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Barbara Waterman
Ira Wennik
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Elizabeth Carr
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Elisa Diehl
Mark Dizard
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Suzi Lonie
Martin Macy
Marg Murnane
Ruth Myer
Thad Myers
Marvin Nakashima
Rebecca Pajak
Michael Paulson
Anne Prendergast
Jennie Prensky
Margie Risenger
Olive Rosen
Martha Sherman
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Leroy Greer
Katherine Griffith
Lee Liddy
Gloria McQuaid
Mary Moerschell

Russell Moeschell — Harry Proctor
Belinda Morgan — Nancy Ritterbush
Barbara Oehler

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Doug Campbell — Ernie Pazmany
Helen Farrell — Barbara Sales

Astronautics
Stanley Sawmelle

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David Aborn — Fred Litwin
Ted Adams — Wendy Lopes
Mae Anderson — Mary Lou Luff
Bill Backer — Bill Lynch
Abe Bass — Liz McGarry
Dick Baumgarden — Jean MacKenzie
Paul Beaudry — Joe McMillen
Frank Beck — James Mangan
Dave Binning — Karen Mannes
Chris Brown — Brad Marman
Harvey Brown — Bill Marston
Fred Busch — Bob Martin
Virginia Busch — June Marvin
Bill Campenni — Elsie Mason
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Brewster Carter — Joyce Melocik
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Dan Coates — John Mercer
Dee Coates — Anne Miskiewicz
Victor Coles — Anita Mitchell
Henry Collins — Elmer Mitchell
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David Finkleman — Jim Rhoads
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'At the Desks'

(Continued from Page 5)

At the NASM information desk, visitors alone (the Museum counts some 10 million a year) are enough to keep the volunteers busy. At MNH, the desk volunteers also handle visitors going upstairs for office appointments in restricted areas and teachers looking for their tour docents.

"Luckily, most people who come to this desk know whom they want to see and have set up appointments," said Pauline Edwards, who usually distributes the stick-on security passes worn by visitors in non-public areas.

"If they want to see a curator without an appointment, like the woman asking for an expert oceanographer this morning, we send them to the Museum's Naturalist's Center," she explained.

Later that afternoon, at the NASM desk, I helped a man pick out three exhibits that would be "perfect" for his kids to see while a volunteer beside me tried to cope with the man who said he was leaving for Germany in 1 hour and had to see the Air and Space Museum. Where should he start?

I heard from the NASM volunteers that a few visitors from rural America have even asked for their autographs so friends back home would know they were really at *the* National Air and Space Museum. Despite my efforts, no one asked me for my autograph all day.

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Marjorie Cahn
Katherine Currier
Betty Goldenberg
Frank Glaser
Rita Goodfleisch
Chantal Hodges
Beth Jacobson
Barbara Klion
Mary Klinger
Anne Laderman
Edith MacGuire
Luciana Mannara
Jacqueline Rea
Sheila Smith
Helen Stark
Leonore Stein
Laura Thrower
Mary Tulchin

National Air and Space Museum
Michael Collins
Jean MacKenzie
Charles Morris
Lois Roberts
Barbara Sales
Agnes Schellenberg
Thomas Sturm
John Tucker

Museum of History and Technology—Dibner Library
Karen Amelang
Patrick Ewing
Jean Strimel

Museum of Natural History
Alta Copeland
Ann Crozier
Karla Farrall

National Collection of Fine Arts/National Portrait Gallery
Nell Sacks
Marca Woodhams

National Zoological Park
Kay Kenyon

Museum Reference Center
Glenn Cook
Jessica Meltzer
Judy Ratner

Cataloging Division
Jacqueline Buell
Roland Springborn

Library Conservation
Sheila Bindman
Daniel Griffin
Lena Kaljot
Ellen McCrady
Eileen Rosenberg
Renata Rutledge

WOODROW WILSON CENTER
Jean Spaulding

MMT Film Is Tops

"Mirrors on the Universe: The MMT Story" has won its second film award, a Golden Eagle for Excellence, from the Council of International Non-theatrical Events.

The CINE award means that the half-hour film will be among those selected to represent the United States in international motion picture events abroad during 1980.

"Mirrors on the Universe" was co-produced by the Smithsonian Institution Office of Telecommunications and the University of Arizona Radio-TV-Film Bureau. In September, the film was awarded a first place gold "Cindy" from the Information Film Producers of America.

Rare Books Census Under Way

Ellen Wells, who arrived at the Smithsonian in January as rare book librarian, has been working with Librarian Mary Rosenfeld and volunteers Karen Amelang and Jean Strimel to make a checklist of rare books shelved in the Dibner Library collection in the History and Technology Museum.

This is just the beginning of a huge task facing Wells—taking a census of rare books throughout the Institution. There are about 14,000 to 15,000 rare books in restricted, secure areas, with controlled humidity and temperature. But Wells estimates that there may be many more elsewhere in the Institution.

A shifting scale of what is rare in science at a certain time makes the first TV technology magazine, published in the 1930s, a rare book today. The Smithsonian has been acquiring books, many of which are now rare, throughout its existence. In recent years, it has been necessary for the Library to establish a rare book program.

"We exist to make this information available for scholars," Wells said, "and we must use our newly established staff and facilities to create records and arrange the collection in retrievable form."

In addition to organizing and utilizing existing collections, the Library must deal with new gifts and acquisitions. Sheer volume makes the job time-consuming.

Take the Dibner collection. In 1976, Bern Dibner donated to the Smithsonian a portion of his library on physical sciences and technology, including all his books from 1469 through 1820, plus 4,500 selectively chosen items of Darwin, Einstein and other 19th- and 20th-century classical science authors. The donation, totaling 8,500 volumes, is now checklisted and accessible. A machine-readable, short-title catalog of pre-1800 books is available on printouts.

"Many libraries are moving to computerized listings," Wells said, "and since the system is available here, I'm hoping eventually we can automate completely."

A number of major libraries in the country, she noted, are struggling with the problem of trying to get collections identified and cataloged—a result of the 1960s fallout when more money was available to buy books and numerous collections were donated. But formal cataloging of rare books takes time and resources and backlogs often accrue. "The thing is that, if the Libraries accept collections, they also accept the responsibility to make them available to readers." And that is just what the rare book program of the SI Libraries is doing.—*Kathryn Lindeman*

Ellen Wells examines rare books.

Volunteer Joyce Schwartz (left) scraping the spine of a rare book. Conservation Assistant Maria Nugent, in the background, wields a gigantic paper cutter.

Of the Oiling of Old Books

Washing paper, oiling leather, scraping spines . . . These are daily tasks not in a laundry, a saddle shop or a hospital but at the Smithsonian Institution Libraries' rare book conservation lab at the North Capitol Street Services Center.

Conservation Assistant Maria Nugent and volunteers Lena Kaljot, Eileen Rosenberg, Renata Rutledge and Joyce Schwartz lavish care on the rare books, newspapers and other documents that come to the lab, which is headed by Johannes Hyltoft.

The volunteers also travel to SIL branch libraries to oil the leather bindings of old books and thereby keep them from becoming brittle. "I can do 30 books in 6 hours on a good day," Kaljot says. "We wipe the leather bindings to remove dust, then rub them with lanolin and neat's-foot oil, using cotton balls or our fingers. I prefer to use my fingers—that way I can feel the book."

"We oil the exposed leather on the inside covering as well, being careful to keep the oil off the paper lining. The books stand on end for a week with little boards under the pages so the weight doesn't make the binding sag. Later, we go back and buff the leather with a soft cloth."

In the lab, Joyce Schwartz gingerly scrapes the spine of a book from which the cover has been removed. "We have to peal off most of the paper and old glue," Schwartz said. "Each page has to be carefully taken off the hand-sewn binding." Eventually, every page will be washed in water, deacidified and re-bound.

With a rubber roller, Kaljot presses air from between the clear polyester sheets covering an 1848 edition of the Southern Watch Tower newspaper. Hyltoft explains: "The paper was crumpled, brittle and acidic. We washed it to remove surface dirt and dust, deacidified it, repaired tears with long-fibered lens tissue and special rice paste mixed in the lab and then pressed it between the protective polyester layers, sealing them around the edges with a special tape."

Hyltoft, an expert in bookbinding with years of experience in the conservation field, has been with the Smithsonian for 3 years. He shares his knowledge with the volunteers, and they give their time.

"There's plenty of dirt and hard work on the same project day after day," Hyltoft says, "but when our volunteers finish a job, they have learned a lot and could do that joy anywhere. There are any number of people who want to help us, but we are very selective in choosing our volunteers. It has to be someone who feels a strong responsibility to conserve irreplaceable books and papers."—*Kathryn Lindeman*

'Courses at Noon'

The Resident Associates' winter program includes six daytime class series designed to appeal to working people. "Courses at Noon" will meet Mondays through Thursdays from noon to 1:30 p.m. beginning this month.

Museum specialist Harold Banks Jr., of the Museum of Natural History, will teach students, starting Monday, Jan. 21, how to identify minerals in the Smithsonian collection via color, luster, hardness and other characteristics. A series of illustrated lectures on China's decorative arts, from Bronze Age jades to Ch'ing dynasty porcelain, with a special session on calligraphy, will also meet on Mondays.

"The Art of the Print" will meet on Tuesdays, beginning Jan. 22. Would-be print connoisseurs will learn the difference between a reproduction and a fine print and discuss the prints of various masters.

Education specialist Marjorie Share, of the Smithsonian Traveling Exhibition Service, will lead on-site, behind-the-scenes introductions to several Washington museums, on Tuesdays, beginning Feb. 5.

On Wednesdays, curator Richard Thorington of MNH's Department of Invertebrate Zoology will lead "The Primate Debate," which will consider the wealth of new information and current theories in an important area of recent scientific inquiry. The class begins Feb. 6.

"Gemstones: A Consumer's Perspective," given by MNH gemologist Pete J. Dunn, will provide practical information for the gem consumer who wants to select choice objects. The class will meet on Thursdays, beginning Jan. 24.

Some of these classes include weekend or class-time field trips. For more information, stop by the Associates office in A&I-1271 to pick up a December newsletter or call ext. 5157.

人民日报

RENMIN RIBAO 1979年11月19日 星期一 农历己未年九月三十 第17455号

方毅会见美斯密桑宁学会代表团

新华社北京十一月十八日电 国务院副总理方毅今天上午会见以保罗·佩雷特先生为团长的美国斯密桑宁学会代表团。该团共十二人，他们当中包括生物学家、古生物学家、人类学家、博物馆学家、考古学家和艺术史专家。会见时，方毅副总理同他们就开展双方的学术交流和科研方面的合作进行了交谈。

Fang I Greets Scientific Delegation from Smithsonian

Shinhua News Agency, Beijing, 18 Nov. 1979. Vice-premier Fang I today greeted a scientific delegation from the Smithsonian Institution headed by Paul Perrot. The group includes 12 people, among them biologists, paleontologists, anthropologists, museum specialists, archaeologists and specialists in fine arts. When meeting the delegation, Fang I discussed with them development of bilateral exchanges in the sciences as well as cooperative science projects.

Translated by M. E. Hale, from Nov. 19 People's Daily (masthead shown at top).

Attendance Invited

"The Muses Flee Hitler," a colloquium to be held Feb. 7-9 in the auditoriums of the Hirshhorn and the History and Technology Building, will mark the conclusion of the Smithsonian's observances of the 100th anniversary of the birth of Albert Einstein, himself a refugee from Nazi Germany.

The colloquium, sponsored by the Smithsonian Office of Symposia and Seminars and funded by the Rockefeller and Joseph H. Hazen foundations, will focus on the migration of artists and intellectuals to the United States during the Nazi era and the resulting impact on American culture. Nathan Reingold, editor of the Joseph Henry Papers, and Cynthia Jafee McCabe, curator for exhibitions at HMSG, will chair the program.

Tickets for individual sessions will be available without charge on a first-come, first-served basis. All inquiries should be addressed to OSSS, SI-507.

Healthy Reminder

The Health Services Division, as part of its preventive medicine program, is offering influenza vaccinations, diabetes screenings and hypertension checkups for Smithsonian employees.

- **Flu injections:** Available in any health unit—Air and Space, Hirshhorn, History and Technology and Natural History—weekday mornings between 9 and noon. Vaccination is recommended for persons who are over the age of 40 or who have chronic diseases, especially cardiovascular or respiratory diseases. Special clinics will be announced for employees at the National Zoo, Fine Arts and Portrait Galleries, Silver Hill and the SI Service Center.
- **Diabetes testing:** Available only in the MHT health unit. A simple screening test to detect undiagnosed diabetes is administered on Wednesday mornings. Call ext. 5631 for an appointment and necessary instructions.
- **Blood pressure checks:** Available weekdays in any of the four health units.

Comings and Goings

Dorothy M. Kapstein, New York textile and fashion consultant, has joined the staff of the Museum of African Art where she is responsible for purchases and sales for the Museum's African gift shop, "Boutique Africa," and its book and reproductions shop.

Kapstein founded the New York import firm of Bamboula in 1972 and traveled extensively in Africa in connection with the firm's work. She has developed textile and crafts lines for magazines and for the home furnishings industry and was a research and exhibition consultant for Dupont Corporation, Bloomcraft, the World Bank and the African-American Institute.

Her designs and imports, under the Bamboula label, have been publicized in such American journals as Seventeen, McCall's Needlework, House and Garden, New Ingenue and WomenSports.

She was senior fashion editor for Seventeen from 1965 to 1971. Kapstein also served as the American editor of IM

Dorothy Kapstein

Report, an international fashion trend magazine published in London. In December 1977, she was chairman of the African committee for Fashion Group, producing a multi-media show entitled "Africa: Its Images and Influences."

Kitty Nicholson has joined MHT's Conservation Division as a paper conservator. She has a master's degree from the University of Delaware-Winterthur Museum Conservation Training Program, where she studied paper and photographic conservation. Last year she served as an intern in the NCFA conservation laboratory.

Robert Hoage has been appointed special assistant to the director at NZP. As special assistant, he will be responsible for planning, coordinating and executing a variety of special projects relating to animal programs, including initial contact regarding animal trades. He will also handle correspondence and other forms of communication between Director Reed and other zoo personnel around the world.

Hoage has a Ph.D. in primatology/biological anthropology from the University of Pittsburgh. He comes to the Smithsonian from the National Laboratory of the Fish and Wildlife Service where he worked as a consultant for a year. He was on the NZP staff in the Department of Zoological Research from 1974-1978.

Other new personnel at NZP include **Virginia Garber,** a secretary in the Office of Zoological Research, and **Don Paddy,** a carpenter.

Bess DeBeck has been appointed to the new position of promotion assistant at the Smithsonian Institution Press. During her first 2 years with the Press, DeBeck served as an administrative assistant, gradually assuming responsibilities in promotion. In her new position, she plans and executes sales efforts for each new trade title that the Press releases.

John G. Gregory, assistant director of the Astrophysical Observatory, has been appointed assistant to the director of the Harvard College Observatory for the present academic year. HCO and SAO are joined under a single director as the Harvard-Center for Astrophysics.

Karen Motylewski, lab manager and research assistant for the Laboratory of Extraterrestrial Petrology, has been named Women's Program coordinator for CFA. She replaces **Peggy Anderson** who recently was named a special assistant in the Director's Office.

Warming up for Fun Run on the Mall.

Sports

By Louise Hull

Running: Twenty-six hardy Smithsonian employees braved the wind to participate in the first Smithsonian Co-ed Fun Run, held Nov. 16 on the Mall. The rules required that four team members had to cross the finish line together.

The Air and Space Museum's team of Joe Corn, Jim Dean, Bill Good, Louise Hull, B.J. King and Jan Steenblick won the 1½-mile race with a time of 10 minutes and 58 seconds. The runners of A&I—Joe Bradley, Karen Collins, Eleanor Crow, Janet Ferrell, John King, Ken McCormick and Donna Repetski—came in second.

Third place went to Natural History: Maureen Anderson, Joe Donoghue, Dave Nickle, Ellen Paige, John Repetski and Bill Rowe. SI Libraries was fourth: Dianne Chilmonczyk, John Hyltoft, Bill Massa, Mark Peabody, Lou Rossignol, Keith Searles and Linda Warden. All runners received ribbons for participating.

Future Smithsonian fun runs are being planned. For more information, contact Eleanor Crow (ext. 6551).

November's interagency race around the Tidal Basin attracted 11 Smithsonian runners. The races—3,000 and 6,000 meters—are held the third Wednesday of every month. Participants should arrive at 11:50 a.m. at the Tidal Basin.

Football: The Smithsonian's Touch Football team finished the season with a 4-3 record. The team won its last two games easily: 13-0 over Howard University Hospital and 26-0 over Georgetown University Hospital. Contributing to the winning season were Tommy Brown of Protection Services, Zeff Richardson of Natural History and Carl Wheatley of the Castle.

If you have more sports news, call Louise Hull at ext. 4367.

From Cambridge (courtesy of CFA Centerline reporter Don Graveline): CFA staffers tested their golfing skills recently, when 16 snake-floggers gathered under clear autumn skies at a local golf course to compete for a series of honors from "Low Net" to "Most Times in the Woods." The winners: "Low Net," Gerry Wheaton (59); "Low Gross," Jim Devine (89); "High Gross," Peg Warner, and "Closest to Pin," Jake Wohn and John Gregory. The Center for Astrophysics Social and Recreational Committee is planning more golfing events once the weather gets warm.

WHAT'S IN A LEAF? . . . *CBCES went to Baltimore recently as education staffer Ann Coren set up a nature classroom at a suburban site that included a woods with a creek and a little-known pine barren. The program was co-sponsored by the Cloisters, the City of Baltimore's Children's Museum. Here, a young environmentalist takes a close look at the textures and patterns of a fallen leaf.*

A Taste of SI Menu Offered Nationwide

The National Associate Program's fourth annual Regional Events tour begins this month with programs running concurrently in Miami and West Palm Beach. Program staff members will work with local sponsors to offer a taste of the Smithsonian's rich cultural, artistic and scientific menu to Associates who live far from Washington.

The 1980 schedule features new topics among its 150 lectures, seminars and performances. New lecture themes this time will include American portraiture, the emergence of the 19th-century women's rights movement, bioluminescence, monumental sculpture, North American archaeology and connoisseurship of miniatures. The Regional Events Program, in cooperation with the Office of Museum Programs, will also sponsor day-long seminars for professional museum personnel in three of the host cities.

The tour will include exhibitions as well. There will be a display of gems and exhibits on historic horticulture, geology and nocturnal animals.

When the program travels to Fairbanks and Anchorage in September, Dr. Henry B. Collins, MNH archaeologist emeritus and authority on Eskimos and the Arctic regions, will reminisce about his explorations of the territory, which began in 1928. The Institution's long association with Alaska began soon after the Smithsonian was founded.

Other cities on the 1980 tour include San Antonio, Des Moines, Grand Rapids and St. Louis.

The outreach program is organized by Robert Angle, director of the National Associate Program, along with Charlene James, program manager, Amy Kotkin as program assistant and MaryBeth Mullen, program associate.

To date, the program has visited 27 cities, co-sponsored events with 123 organizations, invited over 626,000 families and received nearly 200,000 requests for tickets. This year, for the first time, tickets for all of the events will be handled in Washington with the use of a computer terminal located in the office of the National Associate Program.—*Johnnie Douthis*

Support and Earn

Smithsonian employees now have an opportunity to support the Institution financially, with the creation this year of a Pooled Income Fund. (See Torch, March 1978.) Minimum initial gifts to the Pooled Income Fund must be $5,000, but smaller additions may be made at a later date.

The advantages of the Pooled Income Fund to donors are several. The fund allows individuals to support the Smithsonian, or any of its component activities, more generously than might otherwise be possible. Donors continue to earn income during their lifetimes and that of one other beneficiary, if they wish. They receive an immediate income tax deduction for the remainder value of the gift to the Smithsonian; this value is determined by the age and sex of the donor, and there is no capital gains tax on securities given to the Fund.

Two other types of trusts can also be established by donors of larger gifts. A Life-Income Annuity trust will pay a set income to a donor during his or her lifetime or for a predetermined period of time. A Life-Income Unitrust will pay a fixed percentage of market value of the total assets to a donor annually. The minimum gift in both cases is $50,000. There are other similar advantages as with the Pooled Income Fund.

Smithsonian staff members may obtain more information from the Office of Membership and Development by writing to A&I-1465 or calling ext. 5622.

Goodpasture's Landscapes

Carl Goodpasture, a Department of Agriculture taxonomist who works at the USDA Systematic Entomology Laboratory in the Museum of Natural History, will exhibit his landscape photographs, taken in Minnesota and North Dakota, at the MNH staff gallery from mid-January to mid-March.

The exhibit will open on Wednesday, Jan. 16, and continue through March 14.

The gallery is open during staff cafeteria hours, 7:30 a.m. to 2 p.m. For more information about the staff gallery, call Mike Carpenter at ext. 5752.

Satellite Spins Another Year

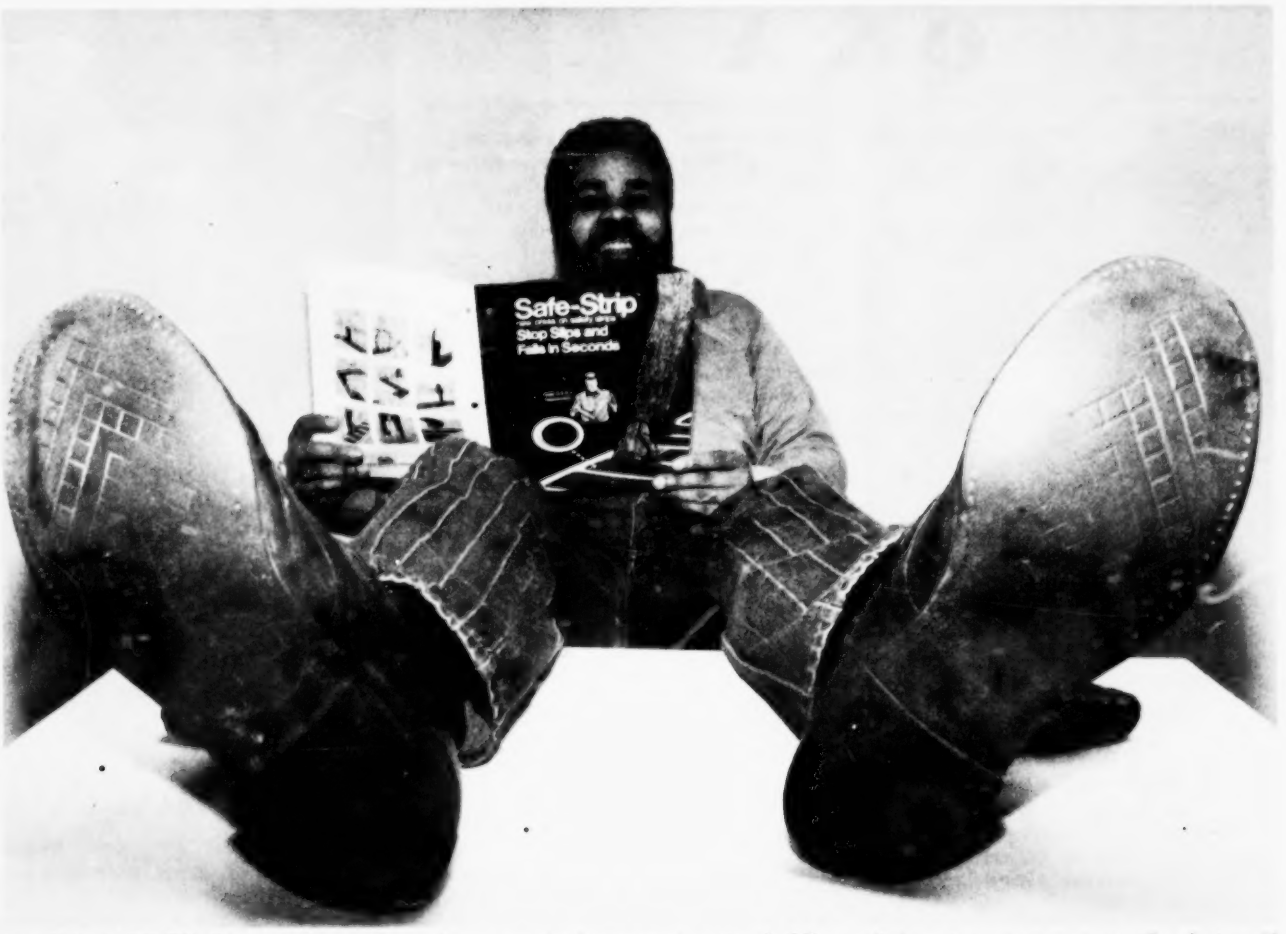
On it spins, sending back invaluable information to ground-based astronomers on celestial phenomena unobservable from Earth. The International Ultraviolet Explorer satellite will celebrate its second anniversary in January, and a proud National Aeronautics and Space Administration expects it could continue operations for another 3 decades.

IUE "has provided scientists from 17 countries with more than 9,000 images of astronomical objects," NASA reports, " . . . and nearly 200 scientists have used these images in support of about 250 research programs and for publication of more than 100 scientific papers."

Among those scientists is a team from the Center for Astrophysics, headed by Andrea Dupree and Herbert Gursky, who have been using IUE to probe X-ray sources, globular clusters and other phenomena.

The satellite was designed as a cooperative effort among the United States, Great Britain and the 11-nation European Space Agency. The satellite program is managed by the Goddard Space Flight Center for NASA's Office of Space Science.

In NASA's view, "the satellite has more than accomplished its announced objectives." The primary goals were to obtain high-resolution ultraviolet observations of astronomically bright stars, planets and stellar and planetary atmospheres and to gather lower resolution observations of fainter, more distant objects such as quasars, pulsars, X-ray sources and other cosmic phenomena.



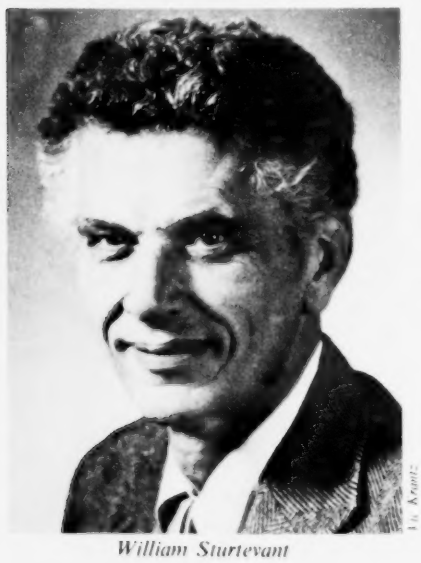
BETTER SAFE THAN . . . *laid up with a fractured foot. That's what Jerry Wells (above) would have been is he hadn't been wearing high-topped safety shoes when the heavy iron pipe he was moving recently fell on him. Wells, who works at the Fine Arts and Portrait Gallery Building, suffered a few bruises, but no time lost from work and very little pain or inconvenience. Conclusion: If you have been issued safety shoes in connection with your job, wear them! Photo by Richard Hofmeister.*

Newsmakers

• By Johnnie Douthis

Everett Jackson, a museum specialist in MHT's Division of Medical Sciences, was honored during a session of the House of Delegates, the lower house of the Ohio Legislature, where he received the John N. Harris Award for his contribution to dental history and education. The prize, given by the John Harris Foundation and Dental Museum in Bainbridge, Ohio, has been awarded only once before in the foundation's 30-year history. Jackson also has been elected historian for the American Academy of the History of Dentistry. He will serve on the organization's executive committee.

William C. Sturtevant, curator of North American Ethnology at MNH, is president-elect of the American Anthropological Association. He will become the organization's president after 1 year. Sturtevant plans to continue the intiatives of past presidents in working for greater cooperation with foreign anthropological organizations and anthropologists on matters of mutual concern.



William Sturtevant

MHT political history curator **Herbert Collins** appeared on WGMS-FM radio to discuss "Teddy Bears and Other Tokens of Presidential Campaigns."

Adelyn Breeskin, consultant for 20th-century painting and sculpture at NCFA, spoke to the Iowa Print Club about Mary Cassatt's use of soft-ground etching.

Jane R. Glaser, program manager of the Office of Museum Programs, gave presentations on museum training at a meeting of the International Council of Museums in Leicester, England.

Freer Associate Conservator **Lynda Zycherman** was the moderator for a panel on the conservation of art objects at the December gathering of the Washington Conservation Guild held at the Corcoran School of Art.

Rita Adrosko, curator of textiles at MHT, gave the keynote address at the New England Weavers' Seminar in Amherst, Mass.

Charles A. Whitney, CFA, is one of 16 scientists appointed to the advisory board of "3-2-1 Contact," a new science series for 8- to 12-year-olds produced by the Children's Television Workshop, creators of "Sesame Street" and "The Electric Company."

MAA Public Information Officer **Thomas Peterson,** who is also a bassist with the Howard University Gospel Choir, accompanied the group to the Seventh Annual National Black Gospel Choir workshop and competition in Atlanta. The group won second place.

Gary Kulik, assistant curator of textiles at MHT, is teaching a course on the history of technology at George Washington University.

NCFA's assistant curator of education, **Margery Gordon,** gave a workshop and lecture at the University of Northern Iowa's Conference on Arts Education.

NASM Deputy Director **Melvin B. Zisfein,** a member of the John F. Kennedy Library Museum Advisory Committee, attended the Library's opening in Boston. Zisfein was recently inducted into the Hall of Fame of Philadelphia's Central High School, his alma mater.

NASM librarian, **Catherine D. Scott,** was an official observer at the White House Conference on Libraries and Information Services in Washington.

Lloyd Herman, director of the Renwick Gallery, was the sole juror for an exhibition at the Cary-Windsor Gallery in Richmond.

John White, a curator of transportation at MHT, presented an illustrated talk, "Day Coach and Palace Coach," to the Cincinnati Historical Society.

Lillian Kozloski, a secretary in NASM's Science and Technology Department, represented the SI Women's Council at the first National Scholarly Research Conference on Black Women, sponsored by the National Council of Negro Women Inc. and held in Washington.

George Gurney, a former NCFA fellow who is the guest curator of "Sculpture and the Federal Triangle" at NCFA, was elected to Allied Professional Membership in the National Sculpture Society.

Walter H. Flint, curator of astronautics at NASM, addressed a New York gathering of the American Stamp Dealers Association on 2 decades of manned space flight as commemorated by U.S. postage stamps.

F.C. Durant III, assistant director of NASM's Astronautics Department, and **Richard P. Hallion,** NASM curator, made presentations for the Cooper-Hewitt Museum lecture series on space. Durant's lecture, "The Rocket Pioneers," was followed by Hallion's presentation on "History of Flight Testing."

Martina Norelli, associate curator of prints and drawings at NCFA, was the sole juror for the "Works on Paper" exhibition at the Arlington Arts Center.

Renwick Associate Curator **Ellen Myette,** who is national chairperson of the Registrars' Committee of the American Association of Museums, gave an annual report to the committee at the Northeast Museum conference in Rochester, N.Y.

Farouk El-Baz, research director of NASM's Center for Earth and Planetary Studies, was invited by the University of Arizona at Tucson to lecture on desert studies for the College of Earth Sciences and the Office of Arid Lands Studies.

Four NASM staffers—Director **Noel W. Hinners,** associate curators **Robert Mikesh** and **Tim Wooldridge** and Executive Officer **Walter J. Boyne**—recently toured the aircraft carrier USS Dwight D. Eisenhower at sea.

Felix Lowe, deputy director of the Smithsonian Institution Press, discussed regional publishing at a recent meeting of the Southern University Presses held at Fripp Island, S.C.

Lillian B. Miller, editor of the Charles Willson Peale Papers at NPG, gave a slide-illustrated lecture, "Charles Willson Peale: Art and Nature in an Age of Enlightenment," at the Columbia University Faculty Club in New York City.

Wilton S. Dillon, director of Smithsonian Symposia and Seminars, delivered a paper on "Margaret Mead as Leader and Citizen" before the American Anthropological Association in Cincinnati.

NASM Director **Noel W. Hinners** was keynote speaker for the Dublin-Worthington Rotary Club's Third Annual All-Ohio Fly-In, a career orientation program for high school juniors and seniors and college freshmen.

Edward S. Ayensu, director of the Office of Biological Conservation, was re-elected secretary general of the International Union of Biological Sciences at its 20th General Assembly held in Helsinki. The BBC interviewed Ayensu on science in the developing world during the conference.

Harold D. Langley, associate curator with MHT's Naval History Division, delivered a paper, "Robert Y. Hayne and the U.S. Navy," at a recent meeting of the Southern Historical Association held in Atlanta. The presentation dealt with the South Carolina senator's influence in bringing changes to the Navy and naval business to his state.

NCFA's **Harry Rand,** curator of 20th-century painting and sculpture, represented the United States and NCFA at the International Fair of Contemporary Art in Paris. He also participated in a New York planning session with the Rockefeller Foundation and other regional representatives on a National/Regional Artist Fellowship Program.

Robert M. Vogel, curator in the Division of Mechanical and Civil Engineering at MHT, was the recipient of the 1979 Civil Engineering History and Heritage Award given by the American Society of Civil Engineers.

Phillip Lundeberg, curator of the Division of Naval History at MHT, served on the Advisory Committee on Maritime Preservation to the National Trust for Historic Preservation, which was instrumental in awarding the 1979 Maritime Heritage Preservation Grants. The committee developed criteria for the 220 grant applications, representing more than $24 million in funding requests. This year's grants, awarded to historic vessels, maritime archaeological sites, shore facilities, museums and educational programs, are the largest expenditure to date devoted to maritime projects by the National Trust for Historic Preservation.

Getting Into Food

American food technology, observed from a historic perspective, was the subject of the second Dibner Rare Book Library Symposium at the Museum of History and Technology in October. The 3-day meeting, which attracted scholars from leading universities, was co-sponsored by the Museum and the U.S. Chamber of Commerce. The 15 papers will be published by the Smithsonian and will be distributed internationally.

Blood Donations

An American Red Cross blood donation center will be set up in classrooms B and C of the Learning Center in the Natural History Building from 9 a.m. to 3 p.m. on Thursday, Jan. 11.

If you are eligible to give blood, call the Office of Personnel Administration on ext. 6271 for a specific time for your donation. You must have an appointment to donate.

Q & A

Richard Holmgren

Henry Elliott

"'Baptism by fire'—that's what we call our first practice tour," Henry Elliott, a docent at the Museum of African Art, says. "Part of our docent training is to organize and conduct a tour for our class members, and that's the worst one. After that, the tours start getting easier."

Elliott, who is retired from the Department of the Air Force, has been a docent at the Museum for a year and a half. But he was a fan of African art long before he came to the Museum. For years, he has made papermache masks for sale, based on photos of original African masks. Working in the basement of his home, Elliott goes through a long, involved process to produce his works of art. Forty-five of his masks were recently exhibited in the District Building when he was chosen artist-of-the-month by D.C. Councilwoman Charlene Drew Jarvis. Elliott was interviewed by Torch staff writer Kathryn Lindeman.

Q. *What got you started on making African masks?*

A. I've had an interest in art since childhood. I used to paint pictures—portraits, landscapes, anything. A portrait I did of Joe Lewis in the early 1970s won first prize at the Washington Post's Photography, Art and Craft Show. I started making masks when I was teaching art to neighborhood kids at the Brookland Community Center in the District. Ironically, when I began to select subject matter for my classes, the first was an African mask. Then I happened upon a book about masks and said, "Why go any further? This is what really interests me." I began getting so many masks in the house I had to start selling them. But it's not easy to part with some.

Q. *How do you go about making one of your masks?*

A. I get pictures of masks from any source; each time I plan a mask I research the meaning and function. I do take certain liberties by adding and taking away parts, but the integrity remains—you can't go too far afield.

I begin with 15 or 16 plastic cans which I use to defiber newspaper by soaking it in water a sheet at a time. It takes about 3 months to become pulpy. When it stinks to high heaven, it smells good to me because that's when I know it's right. I go through a long process of squeezing out the water, mixing in wallpaper paste to the consistency of gravy, then adding more paper to the consistency of hamburger, draining it and so on. Evenutally, I put it on a non-porous board and begin to mold. The sculpture takes about 3 months to dry and has to be kneaded from time to time so that it doesn't separate.

Q. *How did you become interested in working as a docent?*

A. Because of my interest in the masks, I had thought of enrolling in an African art study course at a local university. Then I saw an announcement in the newspaper asking for docents for the Museum of African Art. I didn't even know what a docent was then, but when I saw the ad, I decided, "This is just what the doctor ordered!" I think it far exceeds the instruction I could have gotten in a university—as soon as you get to love one exhibit, here comes a new one and you must learn all about it and incorporate it in your tours.

I had also decided that, when I retired, I wanted to devote some of my time to children, and here I can do that in a structured way. About 90 percent of my tours are with school children. It satisfies that desire.

Q. *Do the kids ask a lot of questions?*

A. Kids often ask questions that adults wouldn't ask for fear they would look foolish. Sometimes, children really come up with profound questions. We use the word "spirit" a lot because the concept of evoking spirits is such an important part of traditional African life. But it's also a difficult concept for children to understand. They often ask, "What is a spirit? Is it a ghost?" You have to work pretty hard to get the idea across.

In talking about traditional religion, I also explain that art was used in the absence of a written language. A mask was a sort of plastic language. The idea is foreign to a lot of people and has to be interpreted.

Q. *Do you have a planned spiel?*

A. I try to center my talk on the interests of each group of visitors. You have to adjust; you can't plan in advance exactly what you want to say. Even though we have some freedom, there are certain basics to follow. Tours are full of surprises and not too many disappointments.

Union Considers Consolidation

Dwight Bowman, president of Local 2463 of the American Federation of Government Employees, briefed members at the union's November meeting on the proposed consolidation of the seven bargaining units now active at the Smithsonian.

All covered employees were given the opportunity to petition for a vote on this issue during a posting period under way in December as Torch went to press. If no petitions result, a final decision on the consolidation will be made by the Federal Labor Relations Authority.

Under the current arrangement, the union may bargain only on issues relating to each separate unit and not on managerial decisions affecting the Institution as a whole.

Currently, the union holds separate contracts with the Institution on behalf of all non-professional, non-managerial and non-supervisory employees in the following bargaining units: Office of Plant Services, Office of Exhibits Programs (including exhibits units in the various bureaus), Mechanical Services Division (a section of OPlantS), Photographic Services Division, Protection Division, National Zoological Park (except police) and the SI Nationwide Unit (all covered employees not included in a separate unit). National Zoo Police, now represented separately by AFGE Local 185, would be included in the consolidation.

For an election to be held, 30 percent of the 2,400 Smithsonian employees who are represented by the union would have to sign a petition requesting it.

Local 2463 will hold its next meeting on Tuesday, Jan. 15, in the Museum of Natural History Ecology Theater at 5:30 p.m. The meeting is open to all union members. If you are not a member and would like to attend, please call Dwight Bowman at ext. 5570, or ask a union member to sponsor you.

SI Tops CFC Goal

The Smithsonian not only met but exceeded its goal of $60,000 for the 1980 Combined Federal Campaign of the National Capital Area.

A preliminary tally of funds received by early December showed contributions of more than $65,000, about $20,000 more than the total given by Smithsonian employees in each of the three prior campaigns. William A. Schaeffler, director of the CFC, extended "congratulations on what can only be termed a spectacular success . . . and deep thanks on behalf of a grateful community."

Dorothy Glenn, of the Office of Personnel Administration, and John F. Jameson, assistant secretary for administration, who organized the Institution's effort, expressed thanks for enthusiasm and hard work on the part of many bureau and office coordinators and keyworkers, for the support of the union and for the generosity of Smithsonian employees.

Volunteer Betty McIntosh removes weeds from a cycad, a popular Victorian era plant.

Flora Smithiantha

By James Buckler

If you've ever wondered about the source of flowers and plants which deck the Smithsonian museums and grounds—from the bumper crop of 12,000 poinsettias which starred in recent holiday displays and the showy orchids near the east door of the Castle to the thousands of tiny alternanthera plants which make up borders in the Victorian Garden—you should know that their propagation, transplanting, potting and grooming are largely the result of the efforts of volunteers working with our full-time staff of seven.

Since it was established in 1972, the Office of Horticulture has been dependent on volunteers for many of its activities—from making decorations for the "Trees of Christmas" exhibition to counting the coins which visitors toss into the fountain in the Arts and Industries Building rotunda. But 15 of our faithful volunteers are so far behind the scenes that we station them across town—at the U.S. Soldiers' and Airmen's Home in northwest Washington, where the Smithsonian maintains its greenhouse nursery complex.

This is where the color floral displays have their beginnings. At the greenhouses, volunteers assist the full-time staff in propagating plants from cuttings or seeds. Last year, they helped to transplant about 35,000 alternantheras for outdoor garden borders and make up more than 200 hanging baskets for the Victorian Garden and other locations. As a matter of fact, every potted plant that we supply to Smithsonian offices and public areas probably has been potted, pinched or pruned by volunteers.

When we started out at the Soldiers' Home, we had only six full-time employees to staff an area covering 42,000 square feet, complete with lath houses and cold frames, 7 days a week. As the Smithsonian has grown, so have the demands for plants and flowers to grace the new buildings and grounds. These needs never could have been supplied without the dedicated work of our horticulture volunteers.

ALL THE KING'S HORSES . . . *This 16th-century battle scene from the Tabriz or Qazvin School is a highlight of "Art of the Court of Shah Tahmasp," on display at the Freer Gallery of Art through March 30.*

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THE SMITHSONIAN
TORCH

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Collins Resigns; Hughes Named Under Secretary

Michael Collins, under secretary of the Smithsonian, has resigned to accept a position in the aerospace industry, Secretary Ripley has announced.

Collins, 49, was appointed under secretary in April 1978 after 7 years as director of the National Air and Space Museum. The former astronaut will join Vought Corporation in Washington, D.C., as vice president-field operations. Vought is the aerospace subsidiary of LTV, a Dallas-based diversified corporation.

Collins will be succeeded by Phillip Samuel Hughes, 62, a former deputy director of the Bureau of the Budget and author of the 1977 Report of the Audit and Review Committee of the Smithsonian Board of Regents.

Phillip Samuel Hughes

Collins joined the Smithsonian as director of NASM in April 1971, when the museum was housed in the Arts and Industries Building and an adjoining Quonset hut. He supervised construction and organization of the new museum and served as director for nearly 2 years after it opened in July 1976.

As under secretary, Collins served as principal adviser to the Secretary and participated in the planning of such projects as the South Quadrangle, the Museum Support Center and the revision of the Regents by-laws.

"Both as director of NASM and as under secretary, Mike Collins has made an enduring contribution to the Institution," Ripley said in a statement. "His clear mind, administrative skills, quiet efficiency and vision will be remembered."

Hughes, Chicago-born, holds a B.A. in sociology from the University of Washington and continued with graduate work there. After World War II service in the Army and Navy, he worked for Boeing Aircraft in Seattle and for the Veterans Administration. He joined the Budget Bureau in 1949 and retired in 1969 as deputy director. In succeeding years he was acting president of the National Institute of Public Affairs, a senior fellow at the Brookings Institution, director of the Office of Federal Elections in the General Accounting Office, assistant comptroller general and assistant secretary in the Department of Energy.

Michael Collins

Richard Holmgren

Energy Savers At Smithsonian

- About 20 percent of SI's electric bill is for lighting.
- "Payback" period for turning off fluorescent lights is 5 seconds. If you leave a room for more than 5 seconds, it pays to turn the lights off.
- Lighting a whole room is wasteful when all that is needed most of the time is enough light to work at a desk.
- Cleaning light fixtures can make a 10 percent difference to the light in a room.

These were some of the surprises which came to light when working group representatives gave their reports at the second meeting of the Energy Conservation Task Force held Jan. 10 at the Museum of History and Technology.

Chairman Tom Peyton stressed that, while working group findings are in many cases preliminary in nature, much is already being done to conserve energy at SI.

Energy saving measures under consideration include turning the cooling units of drinking fountains off during cold weather, replacing incandescent bulbs with fluorescent lamps and turning off decorative outdoor fountains. Other steps include reducing heat loss through entrances and windows, reviewing the schedule of shuttle runs and scheduling seminars on HVAC (heating, ventilating and air conditioning) systems for administrative and other personnel.

Looking ahead, Don Dormstetter stressed the need to be sure that energy saving measures are cost effective. In other words, that reducing energy use in one form doesn't result in increased energy expenditure elsewhere.

Working group reports were presented by David Lellinger for laboratories, Katherine Eirk for libraries, Ed Robinson for exhibits and Jim Mahoney for shops. Also, Mel Zisfein for bureaus and other major offices, Joe Davisson for building management, John Moreci for transportation and George Calise for building systems. Jay Chambers reported on protection services activities, Ohlen Boyd on cafeterias and Phil Anderson on actions taken at the Museum of Natural History resulting in savings of $8,600.

Peyton congratulated the working group representatives on their spirit of cooperation and the effectiveness with which they are tackling their assignments. "I am sure," he added, "that SI employees are fully aware of the need to conserve energy. Our task now is to let them know what needs to be done to reduce SI energy use and to encourage them to come up with more and better ways of doing it."

HEARTS, LACE AND FULSOME SENTIMENT . . . *The Museum of History and Technology predicts a nostalgic Feb. 14 with its exhibit, "Valentines of Yesteryear," opening Feb. 1 and continuing through the month. The humerous depiction of adolescent sentiment shown above was created by Raphael Tuck & Sons, one of the first important valentine makers of the late 19th century.*

1979 Visits Off 6 Percent

By Linda St. Thomas

The early spring of 1979 brought record crowds to the Smithsonian museums in Washington, but overall 12-month figures showed a drop of 1.5 million visits compared with 1978.

The fall-off began after an unprecedented 3.3 million visitors in April. The following month, with the gas shortage developing, the total dropped to 2.5 million. For the rest of the year, each month, except for September, saw fewer visitors than the same period in 1978, although the gas crisis ended in late July.

The total visitor count for 1979 was 23,154,873, a 6 percent reduction from 1978 but a 1 percent increase over the 1977 total. Increased attendance was clocked at two museums last year: the Museum of History and Technology, with 4.3 million visitors in 1979 compared with 4.0 million in 1978, and the Freer Gallery of Art, which showed an increase of 12 percent. Air and Space, the Hirshhorn Museum and the Museum of Natural History all had fewer visitors in 1979 compared with the previous year.

Some Smithsonian staffers believe inflation was the probable cause of the continued month-by-month decline (compared with 1978) in visitors from May through December as well as the decline in weekend attendance. Although admission to museums and to many Smithsonian events is free, lunch, gas and parking could easily cost a family of four as much as $20 for the afternoon.

The Resident Associate Program activities, on the other hand, remained unaffected by inflation. RAP membership continues to increase at about the same rate as in 1978; some 1,200 new members join each month. In September, RAP offered about 90 classes and had the highest number of registrants ever; more than 300 people signed up for the Associates' classes. Attendance at the Associates' special events, which include concerts, lectures and behind-the-scenes tours, continues to be high, although exact figures were unavailable at press time.

(See 'Visitors,' Page 5)

These unidentified fragments were left "for the registrar" with a guard at the entrance to MNH. Santiago says such mysteries are frequent in her job.

Sleuthing At Natural History

By Thomas Harney

Margaret Santiago came to work at the Smithsonian in 1960 and landed a job in the Registrar's Office, processing incoming Museum specimens. She never ceased to wonder at the things that arrived. "Opening the mail here is an unforgettable experience. Over the years I've unwrapped everything from an armadillo to a petrified cat's head. The Smithsonian gets everything, you know. Absolutely everything!"

Within a few years, Santiago became an assistant supervisor, then a supervisor and 2 years ago, following the decentralization of the old central Registrar's Office, she was appointed the Natural History Museum's registrar.

Last month Santiago and her staff moved into permanent quarters in Room 63B, and MNH held ceremonies celebrating the official opening of its new Office of the Registrar.

Though administrative paperwork takes most of her time now, Santiago still gets involved with incoming specimens. The Smithsonian's central mail room is just across the hall from her office, and mail that is not clearly marked for a Smithsonian person or department is routed to her so that a determination can be made about its destination.

Donations to the collections in recent months that arrived addressed simply to "The Smithsonian" included an old wedding dress, a box of plant specimens from Russia, an antique electric clock from Milwaukee and some old sheet music from New York.

Occasionally, a piece of mail arrives that betrays a lack of knowledge about the kinds of research conducted here. For example, the little bottle of liquid sent by a Southern woman with a note:

"To The Scientist: Would you please analyze the eye drops and tell me what they contain. I have an allergy."

Sometimes, a piece of mail can baffle the Registrar's Office. Once a family sent—without a word of explanation—an old letter with penmanship so peculiar that for a day or two no one could read it.

Studying it for about the 25th time, Santiago made out the words "ship voyage." With that as her only clue, she referred the letter to MHT's naval history experts who discovered that the letter was written by John Paul Jones in 1787 to the Marquis de Fleury, a French military officer.

Surrounding Santiago and her staff in Room 63B are those necessities of the Registrar's profession—rows of steel filing cabinets. The largest set holds about 8,500 manila envelopes with the records on all MNH accessions dating back to 1958. Pre-1958 accession records will soon be on file in the office on microfilm. A second set of files contains indexed cards listing donors' names and records of incoming collections for exhibition and study and outgoing specimen shipments.

New additions to the files are made every working day. MNH accessions more than a million specimens a year and has amassed a total collection that now exceeds 62.5 million specimens. Without a good record-keeping system to keep track of the comings and goings of this enormous amount of material, there would be chaos.

A frequent occurence, and a good test of the working efficiency of the Museum's registrarial system, are requests by visitors to see objects given to the Museum years ago by a family member.

"Sometimes, when this happens," Santiago says, "the person may not remember exactly what it was that was given or who in the family gave it. If that occurs, we will probably draw a blank unless the person goes back and gets us more information—especially the donor's name. The name is the key.

"Let's say someone comes in and says he believes we have in our collection a moose skull that his grandfather gave us in 1925. We have a name and we're in business.

"We start by looking in our card index file, but we find no record of the grandfather's name. So we question the visitor further. Is it possible the skull was given to us by some other member of his family after his grandfather's death? Or is it possible that the grandfather had some institutional affiliation?

"Yes, the man says, his grandfather had been employed by the University of Maine and, in fact, was on an expedition sponsored by the University when he collected the moose. So we look in our card index file under the University of Maine and there it is: a record of a moose skull given to us in 1925—the one collected by the man's grandfather.

"With the accession number from the file, we refer him to the Division of Mammals where an aide can locate the skull. Within minutes, the skull is retrieved from the drawer so that the visitor can examine it. Usually, in such cases, the visitor leaves the Museum immensely pleased."

On Stage at Carnegie Hall: Smithsonian Goes to New York

The Division of Performing Arts made its New York debut on Thursday evening, Dec. 27, when the Smithsonian Jazz Repertory Ensemble performed at Carnegie Hall.

The concert, along with two others in this New York series, has been in the works at DPA for the past year. "Our concerts at the Smithsonian have been so successful that we wanted to share them with a larger audience," DPA Director James Morris said.

"The Carnegie Hall concert was well-received," Cynthia Hightower, coordinator of the concert, said.

The second concert, scheduled for Feb. 12 in Lincoln Center, will feature the Smithsonian Chamber Players, directed by James Weaver of DPA, with guest mezzo-soprano Jan DeGaetani. The Chamber Players are old hands on the tour scene; they've traveled to some 16 cities with the National Associates regional program in the past 3 years.

The third New York performance features the 20th-Century Consort, which will be directed by Christopher Kendall, with Hermione Gingold as guest narrator. The performance will be held in Alice Tully Hall at Lincoln Center on May 8.

In planning the concerts, Hightower, who is director of DPA's Education Service, has been working with Shaw Attractions Inc. in New York.

The December concert, unlike jazz concerts held in the past in Baird Auditorium, offered a sampling of music from several noted jazz artists.

The program included "Grandpa's Spell" and "Black Bottom Stomp" by Jelly Roll Morton, "Singing the Blues" by Bix Beiderbecke, "Carolina Shout-Snowy Morning Blues" by James P. Johnson and Fats Waller, "Day Dream" by Duke Ellington and "Misterioso," by Thelonious Monk.

A few unscheduled surpries were: "Shaw 'Nuff" by Charlie Parker and Dizzy Gillespie and "Movin' and Groovin' " by Bob Wilber. For an encore, the ensemble performed numbers from "Lady Be Good."

The eight members of the jazz group have performed at the Smithsonian but not under the name of Jazz Repertory Ensemble. The members are Bob Wilber, director; Dick Wellstood, pianist; Jimmie Maxwell, pianist; Jack Gale, trombonist; Major Holley, bassist; Haywood Henry, baritone saxiphonist; Bucky Pizzarelli, guitarist, and Connie Kay, drummer. —*Linda St. Thomas*

Bob Wilber directs the Smithsonian Jazz Repertory Ensemble.

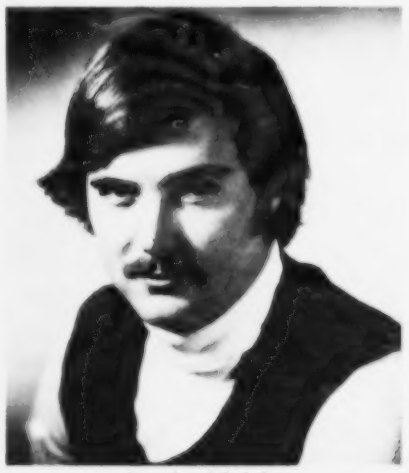
New Chair For Anthropology

Dr. Douglas H. Ubelaker has been appointed chairman of the Department of Anthropology at the Museum of Natural History.

Ubelaker served as the chairman of the Museum's Exhibit Committee and Professional Accomplishment Evaluation Committee. He came to the Museum in 1973.

At MNH, his research has focused on the physical anthropology of the New World, with a special interest in the demography of North American Indians, prehistoric skeletal biology and forensic anthropology. His field work has taken him to Ecuador, the Dominican Republic and areas of the United States. He is the author of a large number of publications, including a recently published book on what can be learned from excavating and analyzing human skeletal remains.

The chairmanship is a 5-year rotating post. Ubelaker succeeds Dr. William W. Fitzhugh, who will return to his active research on circumpolar prehistoric maritime cultures.



Douglas Ubelaker

SI's Scholarly Ties With China

The 21-day trip to the People's Republic of China by a Smithsonian delegation was "definitely a success," Paul N. Perrot, assistant secretary for museum programs, said on his return. "We were impressed by the enthusiasm, friendship and eagerness to help of people we met during our 3-week visit. For too long we have been deprived of contacts with China's ancient culture, and we are now looking forward with eagerness to building scientific and intellectual bridges between our two nations."

Perrot headed the 12-person delegation which visited a wide variety of museums, research institutes and universities in Beijing (Peking), Datung, Quingdao, Nanking, Shanghai, Kunming and Guangzou. The interdisciplinary group of Smithsonian scientists was invited by the Scientific and Technical Association.

"We are hopeful that these contacts will lead to joint research projects, exchange of personnel between SI and the PRC and other means to increase and diffuse knowldge among all peoples," Perrot said. Detailed research proposals are now being drawn up by members of the delegation for presentation to China.

The delegation included: Theodore Reed, director of the National Zoological Park; Thomas Lawton, director, Freer Gallery of Art; Marvin Sadik, director, National Portrait Gallery; Martin H. Moynihan, senior scientist and former director, Smithsonian Tropical Research Institute; Robert M. Organ, director, Conservation Analytical Laboratory, and Tung L. Wu, chemist, Chesapeake Bay Center for Environmental Studies.

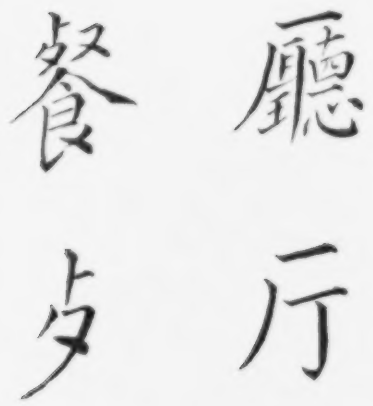
Also, Donald R. Davis, chairman, Department of Entomology; Thomas Soderstrom, curator, Botany Department; J. L. Barnard, curator of crustacea, Department of Invertebrate Zoology; William B. Trousdale, curator, Department of Anthropology, and Richard E. Grant, curator and former chairman, Department of Paleobiology, all from MNH.

Chinese Scientist Surprised By Changes in His Language

By Suzanne Pogell

As the only Chinese-born and educated member of the Smithsonian delegation of scholars to China, Tung Lin Wu, of the Chesapeake Bay Center for Environmental Studies, expected to use his knowledge of the language to ease his own and his colleagues' entry into his native land. Instead, on arrival in Peking, he found that he had difficulty recognizing, much less translating, the characters on many of the street signs and the placards on trains and in hotels.

His overriding impression: "Profound changes are taking place in the writing of the Chinese language," a language that shaped his own education and the culture and traditions of centuries of Chinese students befre him.



Each of the two sets of characters above spells "dining room." Those on the first line represent the simplified version while the two on the second line are formed in the traditional manner.

As a very young boy in Hupei Province, Wu learned to form and to read the intricate and exquisite characters which were the foundations of ancient Chinese and *sine qua non* of traditional Chinese brush painting. Wu recalls having to balance this task—the recognized mark of a scholar—with more worldly studies, much as American children study science and social studies along with reading and writing.

When he was 8 years old, in 1949, his family moved from the mainland to Taiwan. Wu continued traditional and modern Chinese studies until 1966 when a doctoral program in chemistry brought him to the United States.

Wu had known that a determined effort to cut writing time and to simplify the written language's structure was under way. (Since, in traditional writing, a single character—word—can contain as many as 15 or more separate symbols, it is not at all uncommon for symbols to be left out or formed incorrectly, thus distorting the meaning of the words.) But the speed of the process came as a surprise. "I had difficulty even reading the words 'dining hall,' " Wu says. (*See illustration.*)

The purpose of these changes is to make the language more accessible to the masses of Chinese people and to increase the literacy rate. Two byproducts of the government's efforts to institutionalize this process are greater accuracy in written communication and an enhanced ability to keep pace with modern systems of communication. One can imagine the challenge that the Chinese characters present to data collection systems, for instance.

Wu tried during his visit to determine the extent of the simplification system. He was told that the government was attacking the most common words first and that from time to time one could purchase official announcements of new changes in the form of tables and lists of both the traditional and revised forms.

He was unable to track down a copy of the tables, but he did secure a student dictionary. This document contained evidence of an even more dramatic cleavage from China's past—the transliteration of Chinese characters into English.

Even the order of the words has been changed. The dictionary is organized according to the English alphabet instead of the old system of arranging the words according to the relative complexity of the Chinese characters and their various parts. The dictionary also contains the new Chinese spelling system—Hanyu Pinyin. This system matches characters to English vowels and consonants and, depending on which of the "four tunes" or tones of voice is used, can spell any Chinese word.

"The movement towards transliteration is a bridge between the old system and the ultimate supplanting of Chinese characters by English letters," Wu says. Forecast for full implementation generations hence, it should profoundly affect China's technical ability to communicate with the rest of the world.

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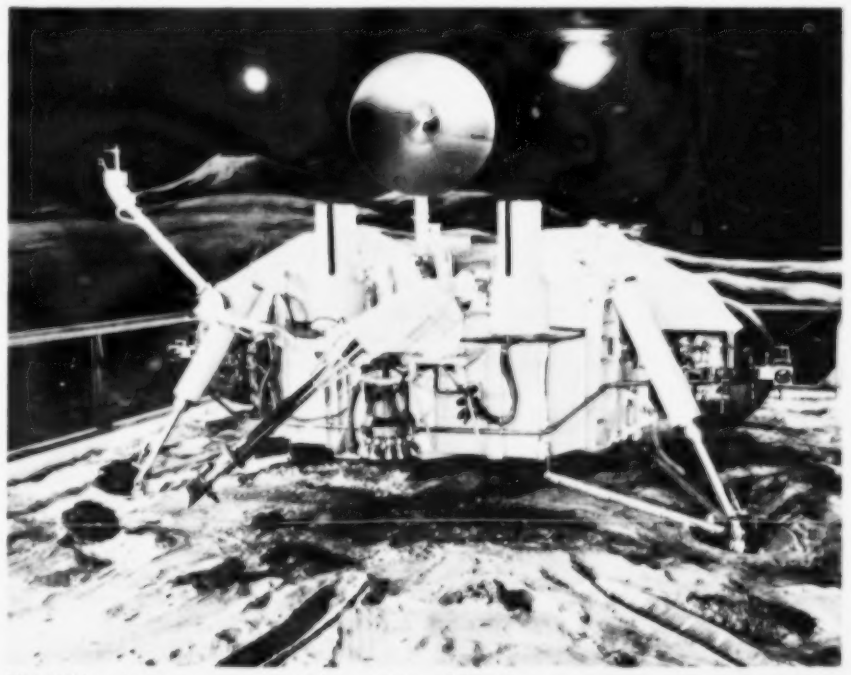


The Viking Lander, a new attraction at Air and Space.

New Craft Lands at NASM

The latest addition to NASM's Milestones of Flight gallery is a Viking Lander, twin of the two craft which landed on Mars in 1976.

The Landers were the first spacecraft to provide a long-term, close-up look at the surface of another planet, checking out its geological and meteorological conditions and searching for life.

The experiments could detect no positive signs of life on the planet's surface but did answer one age-old question: the red color of Mars is caused by iron-rich minerals.

The Viking Lander on display at NASM had been used in ground tests before and during the flight. The Lander joins other such notable craft as the Wright brothers' Flyer, Lindbergh's Spirit of St. Louis and the Apollo 11 command module, Columbia.

Women's Council officers (left to right): Sheila Mutchler, Margaret Santiago, Charlene James, Deborah Warner, Lillian Kozloski.

Richard Hutmacher

Women's Council Greets 1980

Charlene James, manager of the National Associates Regional Events Program, has been named as chairperson of the Smithsonian's Women's Council for 1980.

Other officers include: Margaret Santiago, registrar in MNH, vice chairperson; Lillian Kozloski, secretary in the Science and Technology Department at NASM, secretary-treasurer; Sheila Mutchler, education specialist in the Office of Elementary and Secondary Education, assistant secretary-treasurer, and Deborah Warner, curator in the MHT Division of Physical Sciences, historian.

Council members are elected every 2 years by all SI employees, and members in turn elect a slate of officers annually.

The Council, with 20 voting and 10 alternate members, meets monthly to discuss issues of concern to SI women and minority employees. The officers meet periodically with John Jameson, assistant secretary for administration, who acts as advisor.

The Council recently held the first of a two-part orientation seminar with Betty Adams at George Washington University, where more than 30 objectives for future action were discussed. After researching areas of policy and procedure, services, training and career development, the Council, in consultation with Adams, will focus upon specific projects. These may include establishing career development programs for women, advocating the participation of women in search committees and on the Board of Regents, evaluating the need for daycare facilities, educational programs of interest to the entire Smithsonian community and examining the current employment status and allocation of training funds for women and minorities.

The Council was established by Secretary Ripley in 1972 to "discover the concerns and needs of women employees in order to improve conditions of employment; to improve communications between management and employees, . . . and to offer the opportunity for women to develop leadership ability."

During its first full term (1973-74), the Council looked into the possibility of setting up a child care program at the Smithsonian, analyzed the SI Merit Promotion Program and the skills-file method used in internal recruiting and sponsored a lecture on career development. In 1975, the Council worked with a coordinator of child care and began a seminar and film series.

Council members have participated in seminars on career development, personnel administration, labor-management relations and equal employment opportunity counseling. The Council also sponsored six programs on women's safety and a 5-part series on retirement.

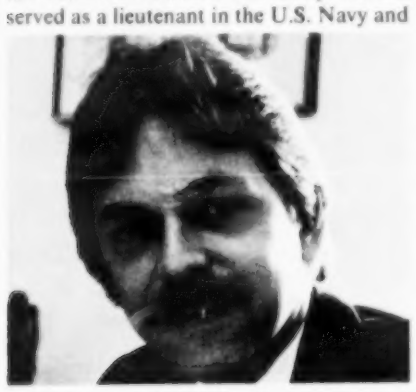
"The 1980 Council looked for guidance to the previous seven councils, especially in educational programming and career development efforts," Charlene James said. "We hope to carry on the Council's tradition for service in areas which may increase the productivity and strengthen the sense of commitment of Smithsonian employees."

In mid-December the Council held a reception at which certificates of appreciation were presented to past members. Dorothy Rosenberg, who recently retired as executive assistant to the Secretary, was honored.

The Council's regular meetings are usually held on the first Tuesday of the month. All SI employees are invited to attend.

Comings and Goings

Joseph Coudon came on board last month as special assistant to the Secretary, with responsibility for keeping the Secretary informed of important Institution developments and providing liaison with those inviting the Secretary's participation in meetings and public events. Coudon comes to the Smithsonian from administrative posts at the Federal Judicial Center and the law school of Catholic University. He has served as a lieutenant in the U.S. Navy and



Joseph Coudon

holds a B.A. degree from the University of Maryland and a B.S. and a J.D. from the University of Florida.

The Secretary's former special assistant, **James M. Hobbins,** has assumed the duties of executive assistant to the Secretary, a position vacated by Dorothy Rosenberg, who retired last month. As executive assistant, Hobbins will work closely with those involved with Institutional policy and administration and with members of the Board of Regents.

Dorothy Rosenberg, who remains with the Institution as a part-time consultant, will conduct a study of the Board of Regents and undertake related assignments.

President Carter has named **Max M. Kampleman,** Washington attorney and political scientist, as chairman of the Wilson Center board of trustees, succeeding **William J. Barody Sr.,** chairman since 1972. Barody will remain on the 16-member board.

Dr. Kampelman, the Center's third chairman, received a Ph.D. in political science from the University of Minnesota and a J.D. from the New York University School of Law. He has been a member of the political science faculties of the University of Minnesota, Bennington College, Claremont College and Howard University.

Prosser Gifford, former dean of the faculty at Amherst College, succeeds **George Packard** as deputy director of the Center. Packard resigned to head the John Hopkins University's School for Advanced International Studies.

Taking over as secretary of the Center's 5-year-old Kennan Institute for Advanced Russian Studies is **Abbott Gleason,** a Soviet-affairs scholar from Brown University. He succeeds **S. Frederick Starr,** who left to become provost of Tulane University. In charge of the Center's new East Asian Studies program is **Harry Harding Jr.,** a Stanford political scientist.

Genevieve Gremillion, a documentation specialist at MHT, retired in January after 31 years of government service. She joined the MHT staff in 1969 as secretary to former director Daniel J. Boorstin. In 1976 she became the documentation specialist for the newly created Office of the Registrar and headed the documents room.

Cora Shores, budget analyst in the Office of Plant Services, has accepted the position of field underwriter with a local insurance company after more than 6 years at the Smithsonian.

Virginia M. Cronin, formerly a college registrar in Boston and upstate New York, has joined the staff of the Resident Associate Program as registration manager.

Lesley S. Manent has joined NASM's Center for Earth and Planetary Studies as a research assistant/geologist. Manent, who has a B.S. in geology from the University of Massachusetts, will conduct research related to lunar and planetary photogeology.

Edmund Barker, formerly with the K-B Theaters, is the new presentations supervisor in NASM's Presentations Division; **Pat Johnston** has been appointed presentations clerk.

SI photographer **Richard Farrar,** most recently assigned to MNH, has retired after almost 20 years at the Smithsonian.

Lincoln's 'Wide-Awakes' light up 1860 New York City campaign.

T-Shirts, Hats Spell Politics

By David M. Maxfield

The presidential primary season opens this month (the results are uncertain), but from the standpoint of color and hoopla, many of the contests already in the history books are clear winners.

At the Museum of History and Technology, Herbert Collins, political science curator, keeps track of the changes in campaign styles and techniques that come and go every 4 years. For sheer extravagance, the campaign of 1840 between William Henry Harrison and Martin Van Buren is one of his favorites.

To give the well-born Harrison an image of humble beginnings, log cabins were set up as election headquarters, other cabins were pulled along the campaign trail, hard cider flowed at his rallies and huge parades and processions, highlighted by torches, banners and the first extensive use of music, were organized by Harrison's backers.

Political memorabilia from this and other elections are part of the Smithsonian's collections, and many of the items are on view at the Museum: buttons, stick pins, bumper stickers, flags, kerchiefs, ceramics, pillows, hats, coins, cartoons, advertisements, lanterns, scarves, T-shirts, posters, lunch pails, buckets, decals, mugs, umbrellas, sewing kits, dishes and sunglasses.

From George Washington's time to about 1840, most campaign items were made at home by a candidate's backers, Collins says. But as the Industrial Revolution gained momentum, manufacturers began producing political glass and ceramic items and printing textiles with portraits of the candidates and their slogans.

Many of the early ceramics actually were produced in England, often leading to confusion. The English craftsmen would ship campaign goods for different candidates—but with the same distorted portrait on each. "They had in mind that all the founding fathers looked alike," Collins says.

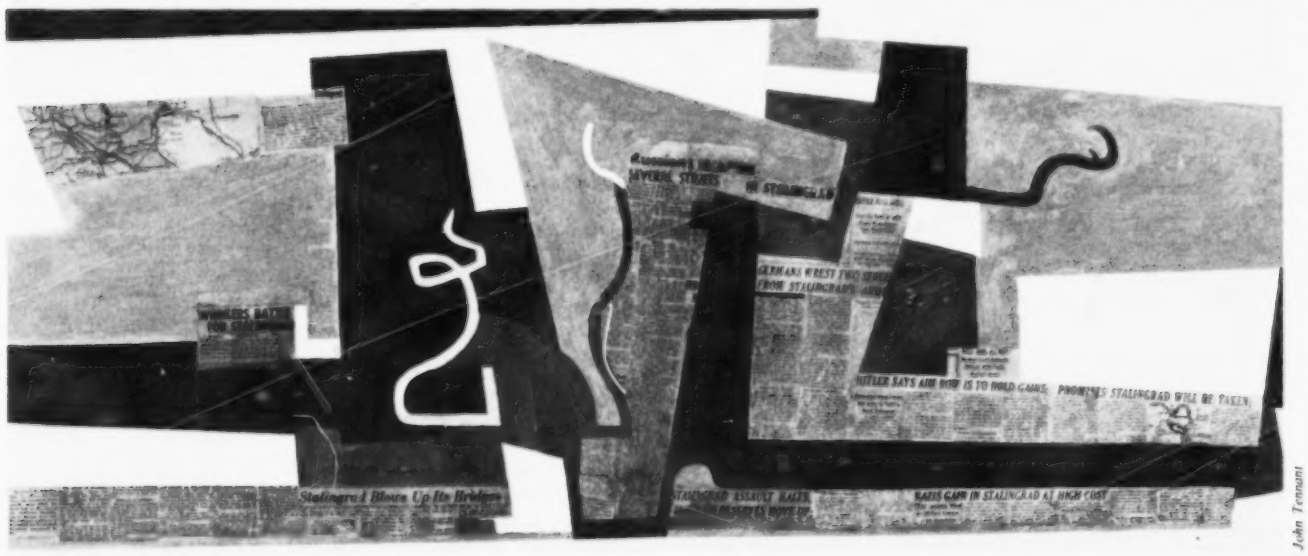
In the 1840 campaign, a merchant in Alexandria, Va. (then part of Washington, D.C.), sent instructions to an English manufacturer to create a ceramic pitcher with a log cabin on one side and a portrait of Harrison on the other. The shipment arrived bearing the English concept of the cabin—a log cottage, complete with rose garden in front.

The number and variety of campaign objects increased rapidly after 1860. Cloth-covered lapel buttons appeared in the last quarter of the 19th century, followed by celluloid in the 1890s and tintype versions in the 20th century.

After 1900, political materials became more subdued, but in recent years, according to Collins, some campaign art is looking colorful again, moving away, for example, from the one-word button that sprang out of the 1940s. (Today, the button is still the most widely used political device.)

Collins says his first priority is to collect contemporary material, then to fill in the gaps from earlier campaigns. "Although an item may look useless now, in 100 years it won't be," he says.

Visitors to the Museum this political season may be surprised to learn that John F. Kennedy's campaign plane, "The Caroline"—its cabin section is on display and contains JFK's bathrobe, political note pads, favorite beverages and such—was the first aircraft to be used by a candidate as his principal campaign vehicle. That was just 20 years ago.



John Tennant

Hans Richter's collage, now back at the Hirshhorn

Battle of Stalingrad Returns to Hirshhorn Walls

By Sidney Lawrence

Hans Richter's "Stalingrad (Victory in the East)," one of the most talked-about works of the Hirshhorn Museum's "Golden Door" Bicentennial exhibition, will be returning to HMSG's galleries beginning Feb. 7, along with 12 studies, documentary photos and text and a self-portrait by the artist.

The 16-foot-long scroll-collage commemorates the World War II battle that has been called the bloodiest in recorded history. Over a 5-month period beginning in August 1942, 1 million people died as the Russians fought off advancing Nazi forces to prevent occupation of the city. Incredibly, Stalingrad was saved and, for the first time, there was hope that the Allied Forces would win the war.

The German-born artist and filmmaker Hans Richter (1888-1976), meanwhile, was in New York, zealously reading newspaper reports about this decisive battle. Richter, a refugee from Nazi oppression, had a passionate interest in the fate of the Russian city: He had served on the Russian front during World War I and had lived in the Soviet Union intermittently during the early 1930s, directing an anti-Nazi film.

Using ordinary window shade material to develop a narrative scroll, Richter integrated newspaper clippings with painted abstract shapes to follow each phase of the battle as it was reported. With news of the final outcome, he pasted on the simple headline, "Stalingrad Free," and painted a buoyant, flowering form of red, yellow and blue.

"Stalingrad (Victory in the East)" was donated to the Museum in 1976 by the artist's widow, Frida Richter, shortly after her husband's death. In 1977, she donated the group of studies, which she had located in the artist's warehouse and studios. While the scroll and studies were undergoing extensive conservation in HMSG's lab, curator Cynthia Jaffee McCabe, organizer of the "Golden Door," corresponded and met with Mrs. Richter and undertook further research to unlock the complex meaning of the scroll and its significance in Richter's life and work.

The exhibition presents these results and also includes a selection of still photos from "Metall," the anti-Nazi film, now lost, on which Richter had worked when he was in the Soviet Union. A documentary about the artist will be shown as part of the Museum's regular film series at 1 p.m. on Thursday, Feb. 7.

READEX FICHE

Scouts Lend a Hand

Jefferson Island, one of the Smithsonian's Poplar Islands, administered by the Chesapeake Bay Center and located in the Bay about 16 miles southeast of Annapolis, got a helping hand from the Eagle Scouts last fall.

Chris Parsons, son of Walter Parsons of the Office of Facilities Planning and Engineering Services, developed, planned and directed an Eagle Scout Service Project to repair the timber bulkhead which had been damaged by Hurricane David in early September. In two weekends, scout volunteers from Troop 995 in Springfield, Va., placed 1,200 cubic feet of oyster shell backfill in a cavity caused when high waves topped the bulkhead.

SI in the Media

By Johnnie Douthis

Local TV news programs ended the year with a burst of reports on happenings at the Smithsonian. PM Magazine of Channel 9, for example, devoted a holiday feature to historic toys in the MHT collection. CBS Morning News dwelt on holiday time at MHT, while horticulturist **James Buckler** discussed MHT's "Trees of Christmas" on Channel 7. The popular tree display was filmed by other local TV stations and by the NBC "Today" show.

CBS Evening News and ABC's "20-20" filmed the post-premiere party held at NASM for the movie, "Star Trek." The "20-20" crew also filmed a portion of the DPA-sponsored Woody Herman concert for a segment on the renewed interest in swing music.

MNH's timely exhibit, "The Precious Metals: Gold and Platinum," which displays spectacular gold nuggets and crystals, their time and culture, make us appreciate the masterpieces all the more."

Forgey also wrote that the Morris Louis show at NCFA provides insights of Louis as an artist and as a person.

A Baltimore Sun critic praised the Hirshhorn for its 80th birthday exhibit of Raphael Soyer works. An Artnews cover story, honoring Soyer on his birthday, noted the HMSG exhibit and illustrated the feature with photos from the Museum's collection.

NCFA's birthday celebration for Jacob Kainen and the current exhibition of his works at the gallery caught the attention of the Star and the Post.

The Nation's Attic

Star writer John Sherwood was enthusiastic about MHT's upcoming exhibit "The Nation's Attic" in an in-depth illustrated article describing the unusual and sometimes hilarious items to be featured.

Cooper-Hewitt's exhibit "Smithsonian," according to a Newsday writer, offered beautiful, fanciful, curious, historical, inventive and downright weird objects culled from Smithsonian museums.

Katherine Eirk, paper conservator at NCFA, and **Steve Tatti,** sculpture conservator at HMSG, were among four art conservators mentioned in a Washington Star article detailing the steps involved in restoring valuable art objects.

Restoration was also the subject of a recent Navy Times article on Silver Hill. The feature quotes **Ed Chalkley,** assistant chief in charge of preservation, restoration and storage, as well as staff members **Reid Ferguson, George Genotti, Harvey Napier** and **Charley Parmley.**

The Boston Hellenic Chronicle reported on the work done by CFA astronomer **Giovanni G. Fazio** as principal investigator for the 102-centimeter balloon-borne telescope, a project of CFA and the University of Arizona.

Miscellaneous Mentions

Edison Centennial News said a new game, invented by SITES and based on a statement made by Edison, gives players the opportunity to discover the wide range of Edison's inventions and the impact of electricity on our lives.

The Post's Sunday Media Fast-Track reported that, when San Francisco police raided a plush house of ill-repute, they found among other items several copies of Smithsonian magazine.

A Commonwealth magazine article on NZP's conservation and research center in Virginia painted a complete description of the facility and opened with the amusing warning seen on the trail, "Do not cross fence. Violators will be eaten!"

Washingtonian of the Year

NCFA Director Joshua C. Taylor has been named by Washingtonian magazine as one of 18 Washingtonians of the Year. The magazine's citation said: "Under his direction during the past decade, the once-obscure National Collection of Fine Arts has grown into a front-rank museum of American art. Arriving here from the University of Chicago with a national reputation as a scholar, he has proven to be an adept administrator as well, able to alternate historical exhibitions of 18th-century painting with a cover-story Rauschenberg retrospective or a popularized show of Depression-era images. For boosting NCFA into prominence, and for generously sharing his expertise with other museums and other Washingtonians, Joshua Taylor is a Washingtonian of the Year."

was featured on channels 4, 5 and 7; interviews with curator **John Sampson White** were included.

The work of **John Falk,** associate director for education at CBCES, was featured recently on Channel 9's Evening News. Falk discussed his studies of lawns as productive natural systems and demonstrated some of the techniques he employs in studying his own back yard.

Archives in the Limelight

On the 25th anniversary of the Archives of American Art, the British art magazine, Apollo, ran an in-depth article on the organization's holdings, the Smithsonian and its founder and the old Patent Office Building which houses the Archives, NPG and NCFA.

Art through the Ages

A Washington Post style critic was amazed at the intricacy of the Persian miniature paintings at the Freer and the National Gallery and concluded that the paintings should be "pored over by the hour." A Washington Post Magazine review suggested there are a thousand-and-one ways to look at the exhibitions.

Benjamin Forgey, Star art critic, wrote that the Freer show "offers a unique, complementary lesson for the eyes. These nice paintings, the commercial knock-offs of

Food Services Applauded

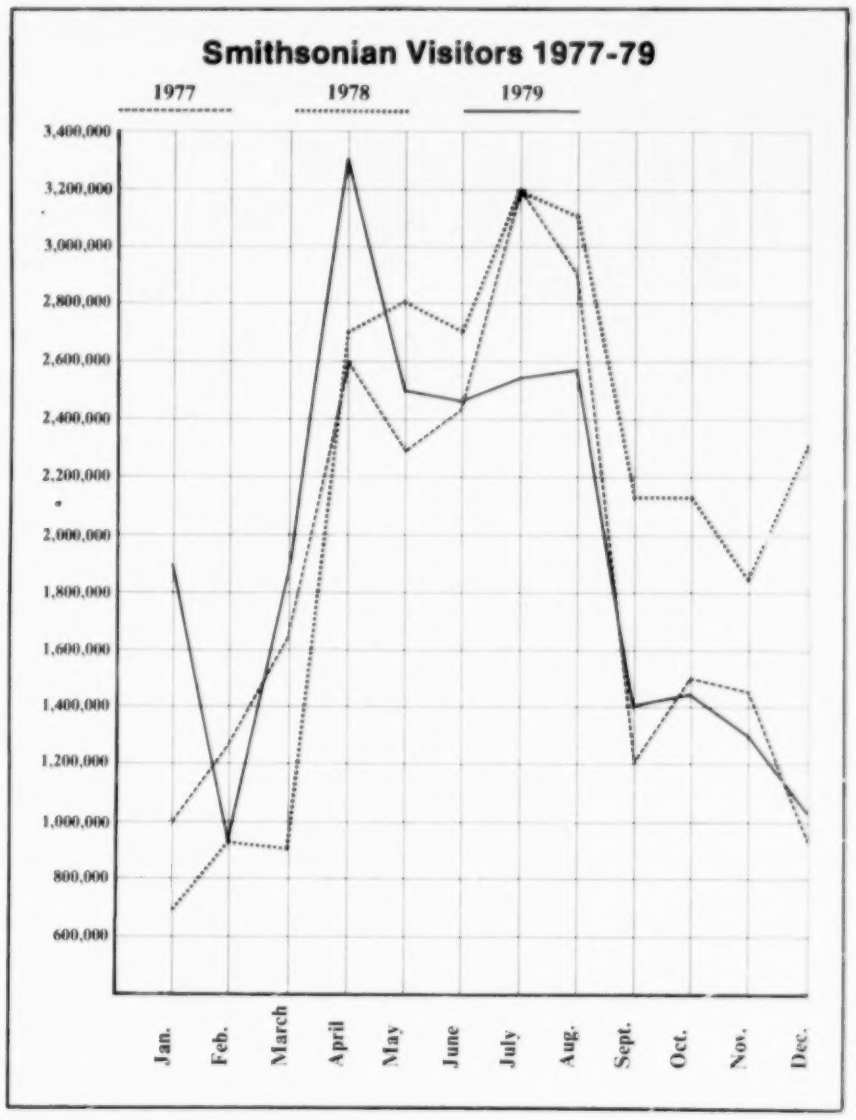
The NASM public and staff cafeterias have been awarded a Certificate of Merit by the District of Columbia for outstanding food sanitation practices and consumer protection efforts. David Dickerson, ARA services manager, was presented with the award by John V. Brink, administrator of environmental health, in a ceremony at the Washington Hilton on Dec. 12.

Theodore U. Offret

Theodore U. (Ted) Offret, 56, co-producer of "Mirrors on the Universe: The MMT Story," was killed in an automobile accident in Tucson.

At the time of his death he was completing work on a film about solar-powered irrigation.

A native of Akron, Ohio, he was a photographer for the Akron Beacon Journal, an industrial photographer and producer of award-winning documentary films on subjects ranging from runaway children to alcoholism and race relations. He joined the University of Arizona staff in 1966 as a producer, photographer and instructor.



'Visitors'

(Continued from Page 1)

Food revenues in the four dining facilities on the Mall (MHT, MNH and NASM cafeterias and the Associate Court in MNH) were up 4 percent in 1979 compared with 1978. However, the customer counts were down about 4 percent in proportion to the overall visitor statistics.

To no one's surprise, parking revenues were down 3.5 percent compared with 1978. Ohlen Boyd of the Business Management Office believes that the decrease is due in part to lower attendance at all museums and especially at NASM, where there has been a 17 percent decrease. Boyd also pointed to the farmers' strike, which closed the NASM parking garage for about a month last winter, and the increased use of the subway system in 1979 as factors in the drop in parking revenues.

Revenues from the museum shops continue to climb, up 6.7 percent from the previous year. But inflation accounted for most of that increase; prices of most items in the shops went up during the year.

To wrap up the decade, the Smithsonian museums had 208,312,857 visitors from 1970 through 1979. In those 10 years the Institution opened three new museums (Hirshhorn, 1974; Air and Space, 1976; Cooper-Hewitt in New York, 1976) and added the Museum of African Art to the complex in 1979.

Special Events Director Dies

Jeanette C. Gladstone, director of the Office of Special Events at the Smithsonian, died Jan. 4 after a lengthy illness.

Secretary Ripley said in a statement: "Mrs. Gladstone was a dedicated, gifted and beloved member of the Smithsonian community. She worked behind the scenes, but her efforts were essential to the success of Smithsonian functions. A vivid and warm-hearted person, she brought both graciousness and efficiency to a demanding position. All of us at the Smithsonian mourn her death."

Gladstone, born in Pittsfield, Mass., on Sept. 3, 1916, was a graduate of Pittsfield High School and the Beth Israel School of Nursing in Newark, N.J. She worked as a registered nurse at Beth Israel Hospital in Newark and at Harkness Pavillion, Columbia-Presbyterian Medical Center, in New York before marrying Dr. Robert W. Gladstone and returning with him to Pittsfield.

Upon the death of her husband in 1964, Gladstone moved to Washington and came to the Smithsonian as a clerk-typist. She joined the Office of Special Events in 1968 and became its director in 1975. She was cited for exceptional service by Secretary Ripley in 1968 and 1977.

Gladstone, who was a resident of Alexandria, Va., is survived by her son, Richard

Jeannette Gladstone

A. Gladstone, of Great Falls, Va., her grandchildren, Rachel and Benjamin Gladstone, and her sister, Rose Kanter, of Pittsfield.

The family suggests that expressions of sympathy be in the form of contributions to the Hospice of Northern Virginia Inc., P.O. Box 1590, Arlington, Va. 22210, or the American Cancer Society of Virginia, 346 Maple Avenue East, Vienna, Va. 22180.

Richard Lerner

Holding their attention with a rock

MNH Outreach Instructs Elderly

Jill Serota-Braden, a staffer for the Museum of Natural History's new Outreach Program, holds the attention of an audience of elderly persons at a nutritional luncheon center in the District.

Serota-Braden is showing the group a slab of sandstone quarried for construction near Washington and pointing out on a large map where the rock and a variety of other deposits of natural building materials are found regionally—from Baltimore to the Shenandoah. The large rock specimens and equipment used by Serota-Braden—such as the maps and the magnifying glasses—reflect the effort to key the presentation to the requirements of elderly people who may be relatively immobile, hard of hearing or limited in vision.

The MNH Outreach staff, coordinated and supervised by Catherine West, last year presented a variety of programs dealing with the natural history of the Washington area to some 4,000 senior citizens and learning-disabled children ranging in age from 3½ to 96.

This innovative effort, funded through trust funds and conducted with the advice and training of the Office of Elementary and Secondary Education, grew out of the Van Outreach Program operated in 1978 by the staff and docents of MNH's Office of Education. The Museum's Education Office Chief, Joan Madden, provides overall direction.

Currently, the part-time staff presenters are Jenny Hyde, Carol Jones, Jeff Phillips and Susan Silverstein.

New Opportunity Plan In Works

A new Cooperative Education Program for students at the undergraduate and graduate levels will begin this fall with at least six students gaining work experience at the Smithsonian.

The project, as designed by Will Douglas, director of the Office of Equal Opportunity, is intended to attract talented students who are pursuing subjects of interest to the Smithsonian.

Participants, who are required to have a "B" average, will spend at least two semesters at the Institution and, upon completion of their education, may be offered permanent employment.

The objectives, project coordinator David L. Stratmon Sr. says, are to increase employment opportunities for college students, including minorities and women, and to enable the Institution to hire professionals in skill areas that have been traditionally difficult to fill.

Data available to OEO indicates that, as recently as September 1979, the Smithsonian had very few women and no black, Hispanic, American Indian or Oriental employees in such jobs as civil engineer, program analyst, communication manager, microbiologist, music specialist, radio or audiovisual production specialist, physicist, geologist, archivist, mathematician or statistician.

Stratmon believes the Cooperative Education Program can be an effective tool in helping the Institution overcome this type of imbalance in its employee profile. He has received a good response from heads of Smithsonian bureaus and organization units in furnishing professional contacts at colleges and universities and selecting placement opportunities.

Four definite trainee positions have already been identified. The Radiation Biology Lab needs trainees in either physical science engineering or bioloical research, Museum Programs needs a trainee in audiovisual production and the Air and Space Museum has asked for a student to do research in the Center for Earth and Planetary Studies.—*Johnnie Douthis*

Jobs To Be Rated

A new performance appraisal system based on the Civil Service Reform Act of 1978 is due to be implemented for all Smithsonian employees during 1980-81. (*See December Torch.*) The portion of the system which applies to senior staff (grade level 16 or equivalent and above) has been completed, and individual performance plans are in the works. The plan covering all other employees is due to be finalized by the end of this month.

The new system includes training of supervisors on how to carry out their additional appraisal responsibilities. A 2-day training session for instructors is scheduled for late February. These instructors, in turn, will train supervisors and managers of major organizational units, in grades 13 through 15, beginning the last week of March.

Training will focus on such key features of the new system as:

- The value of performance appraisal in fostering program improvements and providing a basis for personnel management decisions, such as financial rewards for strong performance or remedial action for poor performance.
- The identification of performance elements to be measured and the development of standards for satisfactory performance.
- The responsibilities of the supervisor for communicating performance expectations and for assisting employees to meet objectives.

Books

A Wall Street Journal reviewer gave high marks to "The Fine Arts in America" by NCFA Director Joshua C. Taylor. The book is to be "read and digested rather than rapidly devoured," the reviewer said, adding that Taylor's approach was an "old-fashioned but powerful method in the hands of a master.

"The American Railroad Passenger Car," by MHT curator John H. White Jr., will "provide the greatest delight for rail enthusiasts of all kinds," according to the review of the Redlands, Calif., Daily Facts.

A Washington Post Magazine article had it that readers of "Threads of History," by Herbert Collins, MHT curator, would find that much of American history has been captured on cloth.

New releases by the Smithsonian Institution Press:

"Mary Cassatt: A Catalogue Raisonné of the Graphic Work," Adelyn Dohme Breeskin, NCFA.

"The Gem Collection," by Paul E. Desautels, MNH.

"Vertebrate Ecology in the Northern Neotropics," edited by John F. Eisenberg, NZP.

"The Stevenson Memorial" by Abbott Handerson Thayer

American Renaissance Studied

The American Renaissance, in the late 19th and early 20th centuries, was a time when sculptors, scholars, collectors, financiers and industrialists sought to identify with the European Renaissance and convinced themselves that its spirit had been captured again in the United States.

This period will be the subject of an exhibition opening at the National Collection of Fine Arts Feb. 22 and continuing through April 20. The exhibition of 250 works, organized by the Brooklyn Museum, includes architectural models, plans, drawings, photographs, paintings, murals, sculpture, glass, bookbindings, jewelry, furniture, fabrics and wallpaper.

In the eyes of the followers of the American Renaissance, the art of the past could provide useful sources for the development of a national American art. Here in Washington, for example, Sen. James McMillian, who sponsored a city plan in 1901-1902, predicted the future of governmental architecture: ". . . Greece and Rome furnish the styles of architecture best adapted to serve the manifold wants of today, not only as to beauty and dignity, but to utility."

Although the period has come to be viewed as "an anachronism caught in the web of the past and having little if any relation to American culture," according to the Brooklyn Museum's catalog, this art "had an impact in its time; overwhelmingly popular, the art projected an image of culture and civilization that many people approved of."

PANEL OF EXPERTS . . . *Children at the Office of Museum Programs' celebration of the International Year of the Child tell why they go to museums. The discussion took place during a 4-day symposium held at the National Gallery.*

Newsmakers

By Johnnie Douthis

Richard H. Howland, special assistant to the Secretary, has received an award "in recognition of significant contributions to the preservation of America's cultural resources." It was presented by Cecil Andrus, secretary of the interior and the director of the Heritage Conservation and Recreation Service.

Superior Performance Awards were recently given to several NASM staff members. **Derek Fiedler, Lucius Lomat** and **Ken Smith** of the Exhibits Division; **Ralph Johnston** and **Joseph Mulcahy,** Presentations Division.

Adelyn Breeskin, consultant for 20th-century painting and sculpture at NCFA, presented awards to outstanding women in the arts when she served as moderator at the Women's Caucus for Art held at the Corcoran Gallery.

Paul J. Edelson, coordinator for adult courses for the Resident Associate Program, assisted in planning and evaluating the agenda for the National University Extension Association Region II Conference at Pennsylvania State University.

David McFadden, curator of decorative arts at Cooper-Hewitt, will be one of the panelists during the New York Experimental Glass Workshop Conference in mid-February. The discussion of "Traditional Directions in Glass Design and 20th-Century Aesthetic Sensibilities" will include slides from the Cooper-Hewitt collection.

Eleanor E. Fink, chief of the Office of Visual Resources at NCFA, lectured on "Care and Maintenance in the Handling of Historic Photographic Negatives" at the Art Libraries Society of North America Annual Conference in New Orleans.

Charles Shields, of the HMSG Building Manager's Office, received a special cash award for his accomplishment in reinstalling baseboard moldings for the entire Museum.

Ralph Rinzler, director of the Folklife Program, was elected vice chairman of the U.S. National Commission to UNESCO at an annual meeting held in Athens, Ga. He has been a member of the Commission since 1976 and has been on the executive committee since 1977. Rinzler has also served as chairman of the committee on culture and was a delegate to the UNESCO world conference in Paris in the fall of 1978.

Robert Sheldon, of MHT's Division of Musical Instruments, played period instruments in a performance of Handel's "Judas Maccabaeus" given by the Levin Baroque Ensemble and the Fairfield (Conn.) Chorale at Carnegie Hall. It was the first performance of a baroque orchestra in Carnegie Hall.

Richard Hallion, curator in NASM's Department of Science and Technology, gave a lecture, "The Path to Kitty Hawk," to the National Capital Section of the American Institute of Aeronautics and Astronautics on the 76th anniversary of the Wright brothers' first flight.

Harold D. Langley, MHT naval history curator, recently gave a paper on "Robert Y. Hayne and the U.S. Navy" in a session on "Southern Legislators and the Navy" at the Southern Historical Association meeting in Atlanta, Ga.

Joanna Scherer, an anthropologist for the "Handbook of North American Indians," lectured on "Historical Anthropological Photographs" at the Museum of the American Indian, Heye Foundation, in the series on "The Ancestors: Native Artisans of the Americas." Scherer also organized a symposium on Still Pictures in Subarctic Research and presented a paper on that topic at the American Anthropological Association meeting in Cincinnati.

HMSG Deputy Director **Stephen E. Weil** wrote "The 'Moral Right' Comes to California" for a recent issue of Artnews. The article outlined the history and context of legal issues for artists.

"Washington Review," a local arts and letters publication, honored the 20th-Century Consort, the Smithsonian's resident ensemble, with an award for "dedication to exploring new forms in music and building an audience for it." The publication also applauded the gospel group, Sweet Honey in the Rock, for enriching Washington and the nation with its music. **Bernice Reagon,** director of DPA's Program in Black American Culture, is a member.

A recent issue of the EPA Journal carried an article by **Secretary Ripley** on "Conservation: A Moral Responsibility."

At the joint meetings of the American Microscopical Society, the Society of Systematic Zoology and the American Society of Zoologists, **Mary E. Rice** was elected president of the ASZ. Rice, a research curator in MNH's Department of Invertebrate Zoology, conducts studies of sipunculan worms at the Fort Pierce Bureau. Among the Smithsonian scientists presenting papers at the meetings were **Meredith L. Jones, Raymond B. Manning** and **K. Fauchald,** MNH; **Jack Frazier,** NZP; **Anson H. Hines,** CBCES; **Robert D. Burke, Robert H. Gore, Cindy L. Hunter, H. Jack McDonald, Paula M. Mikkelsen,** Fort Pierce Bureau; and **Harilaos A. Lessios,** STRI.

Virginia Mecklenberg, associate curator of 20th-century painting and sculpture at NCFA, participated in the Master of Fine Arts Forum Roundtable—reviewing current M.F.A. standards, degree requirements and potential jobs—at the College Art Association meeting held in New Orleans.

Janet Stratton, design manager with the SI Press, has been elected first vice president of the Federal Design Council for 980. The FDC is a professional society of government designers engaged in visual communications programs whose aim is to stimulate design excellence in government agencies.

Herbert Collins, MHT political history curator, was interviewed on KDNI-Radio, Honolulu, about his new book, "Threads of History."

Alan Bain, associate archivist, was the host for the Manuscript Society during a recent meeting at the Smithsonian. Th Society consists of local persons interested in manuscript and documentary sources for history.

The American Physical Society has awarded **Alexander Dalgarno,** associate director of Theoretical Astrophysics at CFA,the 1980 Davisson-Germer Prize donated by Bell Laboratories.

Donald L. Wilhelm, administrative officer at CBCES, has been elected chairman of the SI Conference of Administrative Officers, an organization founded in 1974 to encourage active communication among those responsible for the Institution's administrative functions.

Henry Brown, security officer at CBCES, was presented a Service Award Pin in recognition of 30 years of government service. Before assuming his position at CBCES in 1972, Brown was a serviceman stationed at the United States Naval Academy in Annapolis.

Radio Smithsonian

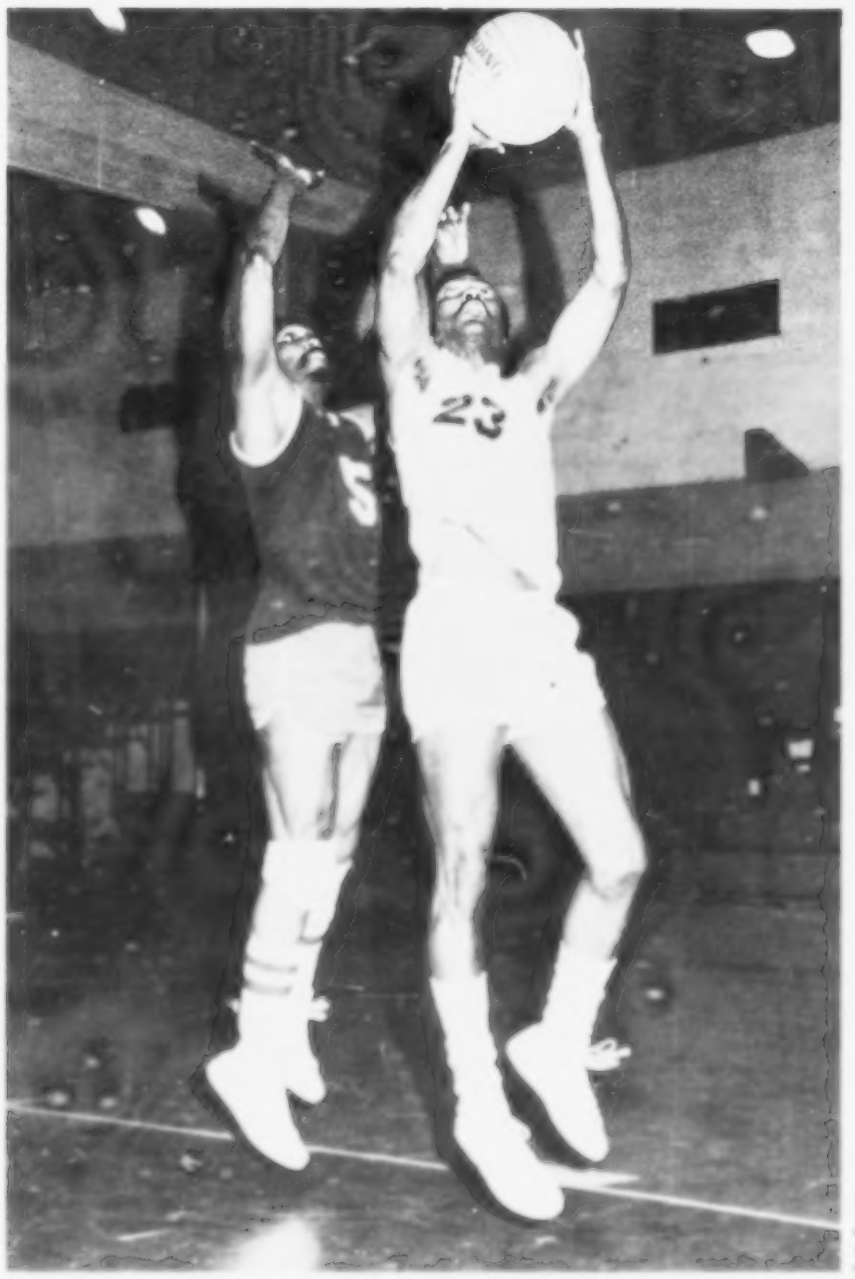
Broadcast on WGMS-AM (570) and WGMS-FM (103.5) Sundays at 9 p.m.

Feb. 3 "All About Edith"—Designer Edith Head, whose costumes have graced scores of films, talks about her career, and "Journey into Northern China"—A look at the deserts of this remote region.

Feb. 10 "Let's Face It"—Highlights from the 1941 Danny Kaye musical, from a new Smithsonian album.

Feb. 17 "Carved in Stone"—Photographer Pehr Hasselrot tells how he believes Swedish Bronze Age carvings are related to carvings found recently in North America; and "Behind American Art"—A look at the work being done by the Archives of American Art.

Feb. 24 Pre-empted by WGMS "Radiothon."



SI's Charles Shelton goes for a basket in game 4 against Ag-Force.

Sports

Two Smithsonian basketball teams, the Smithsonian and the Museum Shops' Running Wild Bunch, are playing in the D.C. Department of Recreation Men's basketball league.

At Torch press time, the SI team had a 5-0 record with victories over Group Health Insurance (46-26), the Running Wild Bunch (54-52 in overtime), Ag-Force (59-31) and Amtrak (61-35), and a forfeit by Sheraton Washington. In game 2, Anthony Addison of MNH and Oscar Waters, Eugene Webb and DeCarlo Wiley, all of NASM, combined for 40 points. In game 5, Addison, Waters and Wiley combined for 50 points.

The Running Wild Bunch is 2-2 with victories over Amtrak (44-29) and Sheraton Washington and losses to SI and GHI. Clarence Thomas was one of the team's leading scorers while Van Smith contributed to the defense.—*Louise Hall*

Platinum Record for SI

The first platinum album award in the 6-year history of the Smithsonian Collection of Recordings was given to "The Smithsonian Collection of Classic Jazz" in recognition that more than 1 million individual discs of the 6-record release have been pressed. John Franks of Columbia Special Products presented the award to Julian Euell, assistant secretary for public service. Also present at the ceremony were James Morris, Division of Performing Arts director, and Martin Williams, director of jazz and American culture.

COILING UP IN A COZY CORNER ..... *This emerald tree boa is one reptilian resident that will return to a redecorated animal enclosure at the Zoo's reptile house after a year-long renovation program which began last month. Improvements and additions will include a visitor information center, an off-exhibit animal research area, a nocturnal hall and a solar energy water heating system. Photo by Francie Schroeder.*

Q & A

Nancy Sinnot has been at work on the inventory at History and Technology since last February. She and a teammate, Nora Oakes, labor in two divisions a week, examining every object and assigning numbers to those which have never been marked with a unique catalog number. By the end of '79, they had delved into physical sciences, transportation, musical instruments, costumes and extractive industries and were en route to ceramics and glass. They form one of five teams working with inventory project manager Warren Danzenbaker and museum staffers to assemble computer records of every single item in the collection, from locomotives and cars to spark plugs and stamps. Sinnott was interviewed by Torch staff writer Linda St. Thomas.

Q. Trying to keep track of some 15 million objects in the Museum of History and Technology must be overwhelming, to say the least. When you walk into a division to do inventorying for a few days, where do you begin?

A. We start with the objects in a division's storage area. I'd say about 75 percent of the artifacts we've checked in the past year had already been officially accessioned and had unique catalog numbers. For these objects, we simply record the name, number and location.

If the artifact has no number, then we describe it, measure it and assign a record serial number. We don't usually comment on the condition of artifacts; that's up to curators and conservators. When we finish the storage areas, we go downstairs to the division's exhibitions and check everything that's on display.

Q. When a storeowner takes inventory, he or she knows what every object is and how long it's been on the shelves. Do you recognize every object you've come across during the inventory?

A. No. In fact, we've found some that no one seems able to identify. Sometimes, they are parts that have been separated from the main artifact. Sometimes, they are leftovers from the old exhibit called "Whatsit," which had a collection of artifacts curators couldn't identify. If we really can't name it, we just put a question mark on the computer sheet.

Q. How do you count groups? For example, is a tea service counted as one item or as several—creamer, sugar bowl, teapot, etc.?

A. It varies from one division to another, but whatever system they use is written down so that a hundred years from now curators will know how to find what they're looking for. A pair of shoes usually has only one number, but a silver set or cream and sugar are individually recorded. In the old days, a listing for "a group of glassware" could mean two items or a set of 500 test tubes, which is just what I found in December. Now we've added a description to the listings so that people will know exactly what it is and how big it is.

Q. In 11 months of inventory work at MHT, what was your favorite collection? What was the most exciting to catalog? The most tedious?

A. The Transportation Division was fun because we had to climb into the cabs of locomotives to add the inventory tags, and we got to peek into the glove compartments and trunks of most of the old cars. In one of the Wintons on display, we found all kinds of things—water buckets, sleeping bags, horse blankets and things supposedly taken on a cross-country trip in this car in the early 1900s—stuffed under a tarp behind the seat. We gave each of them, including the tarp, a separate number.

The inventory doesn't really become tedious because we move around every week. But counting what seemed like millions of spark plugs in the Transportation Divison and the cameos in the Costume Division got to be a bit much.

I expected physical sciences to be dull but there were some really beautiful old charts and maps from the 17th century, old surveying instruments and lots of meters. Most of them had numbers so we went through it quickly. Extractive industries artifacts had some tags that dated back to their days in the Anthropology Department at MNH before this Museum opened.

If I had to pick favorites from what I've done so far, I guess it would be both physical sciences and costumes because their collections are so varied and they are meticulously cared for and stored.

Richard Hutchinson

Smithsonian Research Guide Available

The 1979 issue of "Smithsonian Opportunities for Research and Study in History, Art, Science" is available in the Office of Fellowships and Grants.

The last version was published in 1977, and the new edition is intended to be used for 2 years. It is meant for distribution to members of the public upon request and for use by graduate and postdoctoral students in preparing applications for Smithsonian fellowships. The book does not contain information about higher education and training for Smithsonian employees.

"Smithsonian Opportunities for Research and Study" is an Institution-wide guide to the research activities of the Smithsonian in its various bureaus and to the special expertise of members of the professional research staff. The introduction describes visiting fellowships, internships and other higher education programs at the Smithsonian for members of the academic community in the United States and abroad. Information also is provided about the Institution's research support activities.

Staff members may obtain a copy by visiting or calling the Office of Fellowships and Grants, Room 3300, L'Enfant Plaza, ext. 5071.

Jeff Ploskonka

Reed, Desautels and Buckler (left to right) collecting orchids in Panama

Flora Smithiantha

By James Buckler

A 13-day orchid collecting expedition by an SI team in Panama recently yielded more than 600 rare orchids, 100 bromeliads and 25 calantheas for the Smithsonian's collection of living plants.

The collectors included two orchid growers who have served on the SI Orchid Subcommittee—botanist Robert Read of MNH and Paul Desautels, MNH mineral sciences curator—photographer Jeffrey Ploskonka and the author of this column.

Strategy for collecting the orchids across Panama was planned in Panama City with the help of STRI biologist Robert Dressler and his wife, Kerry.

After several days of preparation, the group set off for the city of David near the Costa Rican border and then climbed to Volcan 10,000 feet above sea level, collecting orchids from fence posts, trees, rock outcroppings and mountain slopes—on the way up and then again on the way down.

Back in Panama City, the group sorted and cleaned the orchids and prepared to set out again for an area in the south of the country recently cleared of trees for cultivation. There the group continued collecting, climbing felled trees over ravines, slipping and sliding in the mud. On one occasion a scorpion emerged from a plucked bromeliad, but went on his/her way without bothering the flower-hunter.

The specimens are now growing in SI greenhouses at the U.S. Soldiers' and Airmen's Home, joining about 17,000 other orchids in the living collections used in research, education and exhibition programs. There, many orchids endangered in the wild are being propagated for future exchange programs with botanic gardens around the world.

The orchid collection, launched in 1973 with only a few hybrids and species, is today one of the most complete in the world. Donations in the past year have added greatly to the species available for study. The Pabst Collection, for one, includes more than 1,400 plants, donated by Mrs. Rudolph Pabst whose late husband spend the last 20 years of his life hybridizing cattleyas to get the rare red color. This collection is valued at more than $25,000 and forms a major part of the permanent collection of living plants. Now they are joined by a new group from Panama.

Chinese Applaud Telescope Film

The new award-winning film, "Mirrors on the Universe: The MMT Story," has made it in China, too.

Jerome Shao, an astronomer at the Smithsonian Astrophysical Observatory in Cambridge, spent the month of November working in China at the Purple Mountain Observatory and visiting other astronomical facilities. While there, he screened the new film for audiences at Purple Mountain, the Shanghai Observatory and the Nanking Astronomical Instrumentation Factory, as well as the Hong Kong Space Museum.

More than 500 astronomers, optical experts, engineers and staff members at these facilities, a large group of Nanking University students and a general audience of visitors to the space museum saw the film. Response was "overwhelmingly positive."

The Shanghai Observatory, which is part of the Chinese Academy of Sciences along with the Purple Mountain Observatory and the Instrumentation Factory, made a copy of the film to submit to the new Chinese national television network, with a script for translation into Chinese.

"Mirrors on the Universe" was produced by the Smithsonian's Office of Telecommunications and the Radio-TV-Film Bureau of the University of Arizona. Nazaret Cherkezian was executive producer and William C. Grayson producer for the Smithsonian. For the University of Arizona, Ted Offret was producer and Alex Hankocy director. James Cornell of SAO wrote the script.

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THE COVER THAT WASN'T (YET WAS) . . . *These Venice, Calif., skaters were originally scheduled to do their thing across the Smithsonian cover for March, the 10th anniversary issue. But the editors decided on another approach and the skaters went into a montage of the 120 covers of the magazine's first decade.*

Smithsonian Magazine Skates Into the '80s

By Edwards Park

Smithsonian, the magazine that survived its obituary, has completed its first decade of publication. In late January 1970, its knell was sounded in a feature article in the Washington Post. This month, its 120th issue goes out to some 1.8 million subscribers. To paraphrase Mark Twain, the reports of its death were greatly exaggerated.

Looking back on the magazine's rather surprising birth and success, those staff members who are relics of the original magazine cadre are at a loss to explain it adequately. Certainly, we worked hard to establish this popular monthly within the Smithsonian family—a feat not unlike introducing a chorus girl to every Boston Brahmin in a Beacon Hill drawing room.

We argued fairly amiably with outraged Institutional scholars; we tried to reassure ourselves in the face of Institutional skepticism. The trouble was, none of us had much of a clue of what we were supposed to be about.

As the scheduled publication date drew near, we searched desperately for self-definition. Were we putting out a magazine about birds and animals? No. About art masterpieces? No. About American antiquities? No. About space-age science? No.

Were we going to be a fancy, slick-paper house organ for the Institution? NEVER! Edward K. Thompson, the tough-minded,

(See 'Magazine,' Page 2.)

Regents Nominated

Resolutions were introduced in the House and Senate in early February to appoint Dr. William G. Bowen, president of Princeton University, and Carlisle H. Humelsine, chairman of the board of Colonial Williamsburg, as citizen members of the Board of Regents.

The two men were nominated at a Regents meeting on Jan. 28, the first of three meetings of the year.

Bowen, who will succeed the late Dr. John Nicholas Brown, joined the Princeton faculty in 1958 and became president in 1972 after serving for 5 years as university provost. The 46-year-old economist holds a B.A. from Denison University and a Ph.D. from Princeton.

Humelsine, 64, was nominated to succeed Thomas J. Watson Jr., who resigned last October when named ambassador to the

Bowen

Humelsine

Soviet Union. Humelsine, a graduate of the University of Maryland, advanced to the rank of colonel during World War II and served as assistant to Army Chief of Staff George Marshall. Humelsine, who was also an assistant secretary of state, joined Colonial Williamsburg in 1953 as executive vice president and served as president from 1958-1977.

GIFT FROM THE FONZ . . . *Henry Winkler, the cool dude of TV's "Happy Days" sitcom, was anything but cool when he donated his leather jacket to MHT's history of entertainment collection. It was, he said, one of the "truly thrilling moments" of his life. Curator Carl Scheele was solemn about the jacket, which he said "evokes the spirit of the 1950s."*

Richard Hofmeister

Treasures of '79 Tallied By SI Registrars

By Linda St. Thomas

The Smithsonian is now the proud owner of a wasp collection, a silver model boat that belonged to Teddy Roosevelt, three grey seals (live ones), a Pittsburgh Pirate's baseball bat, parts of a ship that sank in 1858 and an 1806 portrait of Alexander Hamilton.

Last year, these artifacts, along with some 1.6 million others, were added to the collections. They are still being logged in, described by curators and restored whenever necessary.

The guidelines for collecting have become more stringent over the years, to the point where SI curators reject nearly 95 percent of what they are offered. Nowadays, before being accepted, acquisitions must fill a gap in the collections, be fully documented and be of significant historic, artistic or scientific value.

The Museum of Natural History gets hundreds of thousands of specimens every year. In 1979, MNH also acquired a 48-carat Alexandrite gem, anthropological collections from an isolated Indian community in Equador and from the Aztec peoples of Mexico, various kinds of fossils, four chunks of natural gold and a large collection of wasps.

The Alexandrite, which changes color with the light, was added to the gem collection along with four crystalline gold specimens (one weighs 57 ounces) which, according to curator Paul Desautels, are among the finest known examples of natural gold in the world.

The Paleobiology Department acquired a group of fossilized flowers, insects, fish and birds found near the Green River formation in Wyoming and Colorado and dating back some 38 to 54 million years. The 30,000 tiny parasitic wasps, the largest private collection of the family eruytomidae, were donated by insect expert Dr. Robert Bugbee, once a student of zoologist Alfred Kinsey, author of the "Kinsey Reports" on human sexual behavior.

Money, lights, puppets, baseball equipment and 19th-century greeting cards were among the 1,200 items to enter the collections of History and Technology. The money, from the Chase Manhattan Money Collection, includes examples of ancient forms of exchange, such as the Chinese tao from the 5th century B.C. and 2,500-year-old Egyptian gold rings, American colonial paper currencies and a check written in the 1950s to Howard Hughes for $25 million.

The American lighting devices—tin and glass lanterns, candle holders, whale oil lamps and chandeliers—were donated to MHT last year by antiques collector and author Preston R. Bassett of Ridgefield, Conn.

The bat used by Pittsburgh Pirates player Phil Garner in the '79 World Series and the suit and helmet worn by racer Janet Guthrie, the first woman to compete in the Indianapolis 500, are now part of the Museum's collection of athletic memorabilia. The collection was given a boost last year by the donation of artifacts gathered by Sports Illustrated magazine—Bobby Morrow's Olympic gold medal, Carl Yastrzemski's batting helmet, Chris Evert's tennis racket and a golf club from Jack Nicklaus. These modern sports items have joined Abraham Lincoln's handball, Woodrow Wilson's tennis racket and an original 1923 Yankee Stadium ticket booth in the Museum's holdings.

The political history collection will grow again this year as the staff collects 1980 presidential convention and campaign memorabilia, but in 1979 the curators were able to add some 300 rare political signs and other artifacts dating as far back as the early 19th century.

Roger G. Kennedy

Richard Hollinger

Kennedy Explores 'Attic'

By Linda St. Thomas

You can learn a bit about Roger Kennedy's approach to museums just by walking in the Mall entrance to the Museum of History and Technology.

The first thing you notice now is the American flag, what's left of the 30-by-42-foot original star-spangled banner. What visitors used to notice first was an information desk and large bulletin board obstructing their view of the flag. Also gone are the 50 colorful state flags that hung around the pendulum, detracting from the 15-star Old Glory.

There was nothing particularly dramatic or profound about this change. It was just done to emphasize this most-treasured flag and to let people know that they are entering a distinctly American museum, said Kennedy, director of MHT.

"I'd like to let our artifacts and icons, like that flag, speak for themselves without

Richard Hollinger

too much clutter or too many images to assault a visitor," he said. Kennedy talked about his ideas during a recent interview in his office, which is decorated with his own huge, handmade quilt, made by a woman in West Virginia, and a 19th-century organ.

The other changes he has in mind for MHT are more dramatic, but, of course, they will be made over a span of years. For example, several informal task forces, made up of MHT curators, are exploring ideas for large interdisciplinary exhibitions, such as the imprint of the Industrial Revolution upon the ordered world of our founding fathers or the ways in which stereotypes of male and female roles have changed in America over the last 300 years.

Eventually, Kennedy hopes the research of these task force studies will result not only in exhibitions, but also in books, monographs, films, performances and records. "We'll use every conceivable way to communicate these themes to our public."

To accomplish this, many MHT departments, as well as other Smithsonian offices, will have to work together. But the end product, Kennedy believes, will help museumgoers gain a "rounded view of certain aspects of American history."

One historical period to be thoroughly examined in a major exhibition, tentatively scheduled for 1982, is the George Washington era (1730-1800). Larger than a traditional George Washington birthday tribute, this exhibit is envisioned by Kennedy and the curators, as giving visitors a feel for the 18th century in America and the differences between life in that period and the bustling early 19th century which followed.

The exhibit will use period machines, music, costumes and political memorabilia from the collections to examine Washington's era.

Perhaps the exhibition will be enlivened with performances of 18th-century chamber music and popular waltzes of the day played on authentic instruments—all from the MHT collections, of course.

Performances and craft demonstrations in exhibit areas are great, and "I hope to see more of them in this Museum," he said, recalling the recent Civil Rights conference, concerts and photo exhibit presented by the Division of Performing Arts at MHT and demonstrations of basket weavers from South Carolina complementing last fall's exhibit, "Afro-American Tradition in Decorative Arts."

Speaking of performances, Kennedy himself is no slouch in that department. At the last Board of Regents dinner held in MHT's Hall of Musical Instruments, he sang, in his very best baritone, four Richard Rodgers numbers, including "Fools Rush In" and "Spring is Here." The after-dinner entertainment was a program of American music arranged by Kennedy and DPA's James Weaver.

Next month, the Museum will open "The Nation's Attic," an exhibition whose name might appear to support the very image curators have been trying to shake for years—that the Smithsonian is the country's dusty, useless storage bin. But anyone who talks to Roger Kennedy will know that's not the point of the exhibition.

"This is a light-hearted exhibit, and that was our intention," he explains. "We've always had a corner of trivia which is significant just because it is a corner. It's one aspect of this whole Smithsonian enterprise," he explained. "On the one hand, we're pulling together important artifacts to illustrate large themes, but on the other hand, we're putting up an exhibit of the odd things we have found in the back of the bins and in the closets."

"The Nation's Attic" will present, in an exhibition area designed to look like your grandmother's attic, everything from the gallstone collection of a Baltimore surgeon and the wad of tobacco used by Adm. Robert E. Peary at the North Pole to a silk purse made from a sow's ear and paintings on cobwebs.

Selecting and gathering these strange items for one exhibit is quite a project and it's involved many departments.

To keep up-to-date with the activities and events in a museum as large as MHT means staying in touch with all 21 curatorial departments. So Kennedy has inaugurated regular Monday morning meetings for some 75 staffers to hash out new ideas and review exhibit plans.

Basically, Kennedy likes to compare the Museum to a university or other teaching institution, with one important distinction: "We have everything they have, scholars, research, publications, but we also have the real things—the artifacts."

'Magazine'

(Continued from Page 1)

vastly experienced editor whom Secretary Ripley had hired to manage our destiny, nearly bit his ever-present cigar in two on that one.

We would, decided Thompson after much discussion, be interested in the things that interested the Institution . . . or might interest it . . . or ought to interest it. But that did not mean a magazine filled with bloodless facts. It meant that we would deal with people, just as the Institution does. And we'd do it with plenty of pictures to woo this newly designated amorphous group called National Associates, who were supposed to buy us.

We had a single desk set up in the Great Hall of the Castle in order to receive the thronging National Associates whom we hoped for. Days would go by without a single one showing up. We editors set about lining up articles. Writers kept asking embarrassing questions like how much would they be paid? The advertising people in our New York office—two suites in a hotel of ill repute with a telephone shared by bookies in a tobacco store—plunged through the canyons of Manhattan looking for clients. They kept wanting to know what our circulation was going to be.

Gradually, we began to win out. A few subscribers, a few editorial triumphs, a few ads. Maybe we could swing it. And then the Post clobbered us with that article on Page One of Style: It had been decided, the story said, "to recommend the suspension of ambitious plans for a national magazine to be called 'Smithsonian'. . ."

The news reached Joe Bonsignore, now our publisher, while he was on the way to join our staff. He had left a long and fruitful career in Chicago, crammed his car with belongings and set out for the great adventure in Washington. And over his radio came the story that the magazine was a dead duck. He said the highway seemed to rise under him like the back of a whale and shake itself.

Of course, the story was simply not true, as Ed Thompson made abundantly clear in a high-decibel phone conversation with the newspaper. But the retraction came out on a Saturday. No one reads a retraction in a Saturday paper. We all felt uneasy.

What kept us from a deep depression was our absorption with the problem of office space. At first, we had a storeroom between the floors of the A&I Building, a musty area filled with stacks of papers and entwined overhead with pipes. As we grew larger and complained louder, we were moved into the office now held by the Credit Union. Ed Thompson had an office with a sink where we drew water for coffee. His secretary occupied the same room, but would sometimes come into the next-door office, shared by two editors, where she would stretch out full length on the floor, a maneuver which she assured us was absolutely essential to the performance of her duties.

We were offered space in L'Enfant Plaza, but maintained that we ought to be near the heart of the Institution (wherever that may be). So we were shoved way up under the roof of the A&I Building, where great iron tie rods crisscrossed over our heads, all held together by giant nuts and bolts. On bad days we used to threaten to undo them and take the building apart. On good days we would creep out one of the windows and play catch on an adjoining roof.

We were then put into a disused ticket office supposed originally to serve puppet theater-goers. It was obviously disused because there was no air in it, no windows, no vent, no air conditioner. Gasping and choking, our skins pallid and perspiring, we were at last sprung and sent off to a number of towers that all looked alike.

Some of us moved 19 times before the decade was out. But, in the meantime, the magazine began to appear, and people began to suscribe. Thereupon, our computer system, apparently programmed by trolls, went berserk. It mercilessly dunned people who had faithfully paid their bills. It beseiged others with mailings though they had made their lack of interest known. It sent 400 copies of the same issue to one hysterical subscriber. Our receptionist used to handle complaints during lunch hour, and we often found her sobbing quietly at the phone.

Despite everything, we kept on appearing month after month and growing in size and circulation. Our first issue, April 1970, had 76 pages. We then dropped in size to 64 and held that until October (68 pages) and November (72). Big months, those.

Our current issue, March 1980, has 180 pages. Our recent big month, November 1979, produced 212.

Another news story about us in 1974 pointed out that our rate of growth was second only to Penthouse. All the male editors felt compelled to check Penthouse out to see for themselves. By then, we had gained a bit of confidence and could at least feel—though not describe—our identity. When an article was submitted that simply wasn't right for us, we now knew it and could say so. We couldn't give the author very good reasons, but then writers are always complaining anyway.

Best of all, during this decade, has been our slow, sometimes grudging acceptance by the Institutional family. The Beacon Hill drawing room has found a niche for the chorus girl, and the Brahmins are kind to her, though sometimes with averted eyes.

The chorus girl is grateful. She's sorry for the fuss she's caused, and she promises to do the dishes any old time.

And so on to the next decade.

'Saturday Live' Offers Music

"Saturday Live at the Smithsonian," a new series of musical programs launched in January by History and Technology's Division of Musical Instruments, offers everything from folk to classical in the Musical Instruments Hall at 2 p.m. each Saturday.

"We've had weekday demonstrations for years, along with some evening concerts," curator Cynthia Hoover says, "but a Women's Committee grant has given us the chance to try something different to introduce people to our studies and instruments."

Hoover wants to keep the programs informal—"loose and fluid"—with lots of variety and a new flavor and direction.

"I see 'Saturday Live' as a chance to get out some kinds of instruments we normally don't put into use," Hoover says. "The instruments should be heard, not just seen."

Many of the performers will be chosen from the local area, but their music must have some relationship to the collections. Some will play instruments from the collections, others will use their own.

Jeff Plotkinska

SI's Robert Sheldon will perform at 'Saturday Live' in future months.

"Saturday Live" offers the following for March:

- March 1—Traditional and contemporary country music from Vermont's Northeast Kingdom, with musicians Burt Porter, playing guitar, fiddle, banjo and harmonica, and Sandy Kepler on guitar.
- March 8—An open rehearsal with Cornell professor and keyboard artist Malcolm Bilson playing Beethoven, Franck, Schumann and Debussy on SI's Steinway grand piano.
- March 15—Musician Howard Bass will play and discuss plucked string instruments.
- March 22—Birthday greetings to Johann Sebastian Bach.
- March 29—Violin sonatas composed by Jean Marie Leclair (1697-1764) with Cornell professor Sonya Monosoff on violin, SI's James Weaver on harpsichord and Kenneth Slowik, a member of the Smithsonian Chamber Players, on violoncello.—*Kathryn Lindeman*

SI staff architects and engineers propel themselves out of L'Enfant offices to study mobility problems encountered daily by disabled persons who visit and work here.

Facilities Staff Takes to Wheels

By Kathryn Lindeman

Four staff architects and engineers in Facilities Planning and Engineering Services—Tee Allen, Tom Myers, Mike Miller and Bob Ridgley—spent a day last month in wheelchairs.

The four don't ordinarily require wheelchairs. They were taking part in a pilot program, "Day on Wheels," first started by the General Services Administration to give employees first-hand experience in wheelchair mobility.

"This was not an effort to analyze accessibility problems in each SI building," Allen said, "but to make us aware of what it's like to be in a wheelchair. What normally seems like a simple thing for us, crossing a door threshold, for example, takes some effort in a wheelchair." Getting through a door with an automatic closure device, the four agreed, was particularly difficult.

"As designers," Myers said, "we deal with standards a lot. But during our day-in-a-wheelchair, we found that some places that are rated as inaccessible—the SI Building elevator for one—can be managed with great difficulty, while other areas, which meet minimum standards and are rated 'accessible,' are just as difficult to get around in."

Miller added: "Even the work areas in our own office posed problems. The desks were not high enough and the filing cabinets, Xerox machine and data storage terminal were all on the wrong levels. We did have one advantage, though, in traveling together to the other buildings—we could help each other."

By the end of the day, the weary designers had tired muscles from propelling the wheelchairs, had taken to wearing gloves because of sore hands and scraped knuckles, and were ready for the experiment to end.

But they also had a greater awareness of the problems involved: out-of-reach elevator controls, planning how to get from point A to point B, exhibit cases with labels too high and glare from the lights—"lots of things you don't think of till you're there," Myers said. Frustration was the worst problem of all, the men discovered. They had all been pretty much aware of the locations of the architectural barriers but not of the psychological frustration in trying to surmount them.

Ridgley pointed out that lack of funds is the usual reason given for not correcting inaccessible areas. It costs about 5 percent extra to make new buildings accessible to the handicapped, but the expenses are much greater when making changes to an old building like the Castle without violating regulations protecting the architectural integrity of historical landmarks.

"The interesting thing, though," Miller said, "is that able-bodied people use ramps instead of stairs when given a choice. People in wheelchairs require more space to move around, but people who aren't in wheelchairs work better in additional space, too. Although the law requires that facilities be made accessible, you can't legislate understanding of the problem. The real crime will be if programs like 'Day on Wheels,' which help with awareness, stop with this office."

Ridgley feels that other SI employees who deal with the public, directly or indirectly, should try a "Day on Wheels." Says he: "It was a benefit to me as a designer *and* as a human being."

SMITHSONIAN TORCH
March 1980

Published for Smithsonian Institution personnel by the Office of Public Affairs: *Alvin Rosenfeld*, Director; *Susan Bliss*, Editor; *Kathryn Lindeman*, Editorial Assistant.

Mall Guide for Disabled Ready

Visiting the Renwick can be a spontaneous event for most of us, but for someone in a wheelchair, advance planning is required. It's easy to enter the Arts and Industries Building on wheels, but you have to know exactly where. And if you're coming down to the museums by Metro in your wheelchair, how are you supposed to know where that elevator will leave you?

The answers to these questions and more can be found in a bright blue brochure, just published by the Office of Public Affairs, called *A Guide to the Smithsonian for Disabled People*. Two years in preparation, the publication was a cooperative effort of the Smithsonian and the President's Committee on Employment of the Handicapped, which provided funding.

The brochure lists accessible facilities and programs adapted for disabled visitors in 12 Smithsonian museums and the National Zoo, as well as the National Gallery. A map of the Mall indicates external building features, sidewalks, reserved parking spaces and Metrorail stations, including elevator locations.

Print and braille editions of the guide are available upon request from information desks in the museums or by mail from the Visitor Information and Associates' Reception Center. Copies are also being distributed to libraries, school systems and organizations of handicapped people.

Plans call for periodic updating of the brochure as access to Smithsonian buildings is improved and new programs are set up.

Serving as advisors on the text were staff in the VIARC and in the offices of Equal Opportunity, Elementary and Secondary Education, Facilities Planning and Engineering Services and Support Services.

Natural History Access

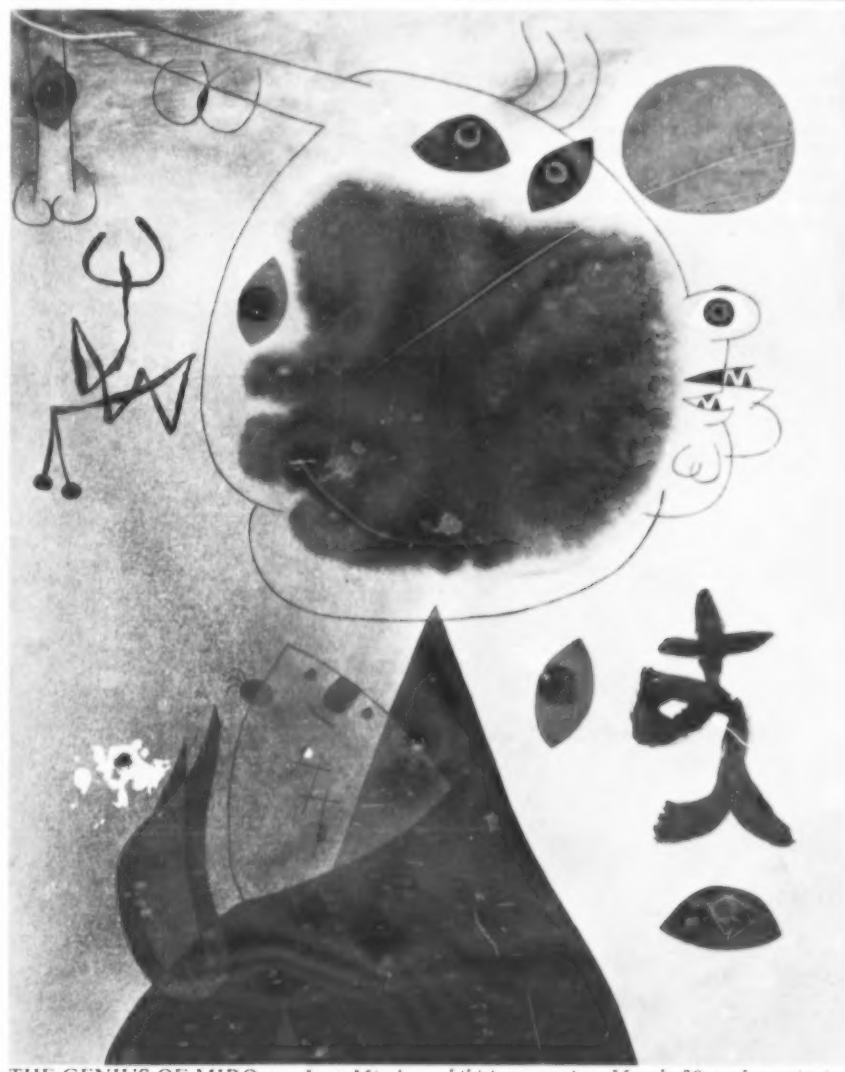
The Museum of Natural History will soon offer better access to handicapped visitors through a series of ramps and automated doors at its main Constitution Avenue entrance.

"Work now under way, and expected to be completed by early June, involves construction of one ramp leading to an automated outside door and a second ramp leading to an automated inside door with access to the lobby," Jerome Conlon, MNH building manager, said.

The Museum's original doors, glass with bronze frames, will be retained at both accessible doorways, but will be refurbished.

At the same time, changes are also being made at the Museum's Mall doors for a different purpose—to improve visitor access. Two new sets of doors are being cut—one set on each side of the existing doorway—to double the capacity of this heavily used entrance.

The work, Conlon said, has been planned so that at no time during the construction will access to the Museum be blocked at either main entrance.



THE GENIUS OF MIRO . . . *Joan Miro's "Woman and Little Girl in Front of the Sun" (1946), from the Hirshhorn Museum's permanent collection will be one of 45 paintings in "Miro: Selected Paintings," a major exhibition opening March 20 and continuing through June 8. The show, which also draws from numerous private and public collections, will span nearly 60 years of work by the modern master from 1914 to 1974.*

Books

Adelyn Breeskin, consultant for 20th-century painting and sculpture at NCFA, was the guest of honor at an autographing party for her new Smithsonian Institution Press book, *Mary Cassatt: A Catalogue Raisonne of the Graphic Work*. The Valentine's Day event was given by Washington gallery-owner Franz Bader.

Science in 19th-Century America: A Documentary History, by Nathan Reingold, editor of the Joseph Henry Papers, has been reissued in hardcover by Octagon Books. It was originally published in 1964.

SITES has published two children's books: *On the Rocks*, by artist Douglas Masonowicz, in connection with the exhibition "Ice Age Art," and *By the Light of the Qulliq, Life in the Canadian Arctic*, by Wendy Adler Jordan, accompanying the "Inuit Sculpture" exhibition.

Smithsonian staff members who have authored, edited or illustrated books may notify SI Press Deputy Director Felix Lowe so that their work can be listed in Torch.

This month's listings:

Sourcebook on the New Immigration, Implications for the United States and the International Community, edited by Roy S. Bryce-Laporte, RIIES; Transaction Press, 1980.

The Index Nominum Genericorum (Planetarum) three volumes co-edited by Ellen Farr, MNH; Bohn, Scheltema and Holkema, The Netherlands, 1979.

Geographic Variation in Social Behavior and in Adaptations to Competition Among Andean Birds, by Martin Moynihan, STRI; Nuttall Ornithological Club, 1979.

Radio Smithsonian

Broadcast on WGMS-AM (570) and WGMS-FM (103.5) Sundays at 9 p.m.

March 2 "Voices of the Civil Rights Movement."

March 9 "Faster than Sound"—Charles E. "Chuck" Yeager, the first man to travel faster than the speed of sound; and "Off the Pedestal"—The story behind the "Women's Pavilion" at the 1893 World's Columbian Exposition.

March 16 "Interpreting History"—with Roger Kennedy, new MHT director; and "From Capetown to Cairo: 1932"—with the authors of "Olivia's African Diary."

March 23 "Sunlight and the Secrets of Life"—A visit to the Smithsonian's Radiation Biology Laboratory; and "The Christy Girl."

March 30 "The Astaire Factor"—With pianist John Eaton.

Among the people at DPA's 5-day conference on the Civil Rights Movement, marking the 20th anniversary of the first sit-in, were (left to right): Ibisto Ajamu, song-leader; panelist James Farmer, former CORE director; Mary Ethel (Jamilia) Jones, song-leader, and an enthusiastic member of the audience. Photos by Richard Hofmeister.

Faces of the Civil Rights Movement

Rollie Baggett

A puppet tells the tale of Timbuktu to children at ANM.

Puppets Bring Life to History

The young audience was actually in Washington, seated on the floor in the "Out of Africa" exhibition at the Anacostia Neighborhood Museum, but their minds' eyes were being transported to Timbuktu.

Close by the "Gateway to Timbuktu," a section of the exhibit, they had just witnessed the ANM Black Heritage Puppets make their performing debut with a tale about Timbuktu and its proud inhabitants who were to become slaves in the New World. Following the show, puppeteer Schroeder Cherry offered a program of song, dialogue and discussion about the whereabouts and wonders of this most mysterious of cities.

The colorfully costumed rod puppets were made by Cherry, coordinator of outreach services at the Museum. He was assisted by museum volunteer Carolyn Jefferson.

In addition to performing at the Museum, the troupe will take its programs into the local schools.

Additional programs of music, films, dance and poetry were given during February in observance of Black History Month. ANM scheduled weekday events and the Museum of African Art and the National Portrait Gallery were hopping on weekends.

Also, during February, NPG displayed its newly acquired daguerreotype portrait of abolitionist Frederick Douglass. The Division of Performing Arts introduced the Chicago puppet troupe, "Blackstreet U.S.A.," in its Discovery Theater, and the Resident Associate Program is sponsoring a series of films produced by and about blacks over the past 50 years. The series continues into March.—*Johnnie Douthis*

SI Goes South

For the second year, the Southern Arts Federation is sponsoring a series of seven seminars organized by the Smithsonian's Office of Museum Programs and led by Smithsonian staffers. The workshops, described as "an important aspect of the Federation's professional development programs," are open to museum staffers in 10 southern states. The areas of study range from fundamentals of museum management to museum membership programs, from soliciting and administering grants to museum programs for disabled visitors.

Zoo Offers Families Free Sunday Events

Imagine a child turning into a monkey before your very eyes, or a young father becoming an elephant sauntering across an African plain. Such transformations took place, sort of, when hundreds of youngsters and their parents participated with Archaesus Mimes in an afternoon's activities at the National Zoo.

"Walk Like the Animals" was one of a series of learning experiences in "Sunday Afternoons at the National Zoo." The program, which began in November and is scheduled for almost every Sunday until mid-March, is the collaborative creation of the staffs of the Zoo and Friends of the National Zoo. It is designed to provide young and old with insights into the animal kingdom and to stimulate interaction between parents and children through creative activities.

Zoo tours, films, arts and crafts workshops and storytelling sessions with various themes are included in the 14-week series. Programs have dealt with snakes, the principles of flight, animal pantomime, zoo photography and the construction of newspaper animals.

The series is the Zoo's first attempt to sponsor free winter events specifically designed for family groups. Plans are under way to continue the program next year.

The series concludes this year with "Focus Africa" (with staff from the Museum of African Art) on March 2, "Animals in Animation" on March 9 and "Year of the Wildebeest" on March 16. The events will be held in the Zoo's Education Building (near the Connecticut Avenue entrance) from 1-3:30 p.m. Everyone is invited. For further information, call ext. 7300. —*Ilene Berg Ackerman*

Correction

The story, "1979 Visits Off 6 Percent," which ran on Page 1 of the February Torch, contained an error. Attendance at Resident Associate classes during the fall 1979 term was 2,800, up by 300 from the fall of 1978.

New Board Reviews Supergrade Matters

The Smithsonian Executive Resources Board was established recently in accordance with guidelines from the U.S. Office of Personnel Management. The Board replaces the Smithsonian's Executive Manpower Resources Board established in 1971.

The ERB, which is accountable directly to Secretary Ripley, is charged with responsibility for managing all federal and trust fund supergrade matters. Among the Board's activities are the allocation of supergrade spaces, ranking of requests for new spaces, monitoring promotions, reassignments and other personnel actions, establishing search committees and overseeing recruitment, considering the needs for executive training and development, reviewing performance and recommending awards.

Under Secretary Phillip S. Hughes serves as chairman of the Board, with Director of Personnel Howard Toy as its executive officer. The director of Equal Opportunity serves in an advisory capacity on equal opportunity matters. The assistant secretaries and the treasurer of the Institution complete the Board's membership.

LOOK AGAIN—SHE'S A LADY . . . *This Diptych is a scene from a Kabuki play showing the fury of Yaegaki-hime (upper left), whose love for one of the warriors on the right was not returned. These color woodblock prints are among the 18th- and 19th-century selections on view at the Freer Gallery through April 1.*

READEX FICHE

Mythology To 'Modern' Slang

Zippers and the foxtrot are in, Grand Central Terminal in New York is completed, St. Petersburg is now Petrograd, Albert Schweitzer has opened his hospital in the French Congo, Albert Camus and Richard Nixon are born.

The year is 1913. It is also an important year for Orville and Wilbur Wright, who have just won a court battle against Glenn Curtiss over a patent on airplanes. The Wright Company is exhibiting planes in booths at all the major aeronautical expositions in the country.

Sixty-seven years later, visitors to the Early Flight Gallery, scheduled to open this month at the National Air and Space Museum, will be surrounded by the sights and sounds of an aeronautics exhibition just like those in which the Wrights participated.

A three-piece band of plaster mannequins will be perched on a balcony to "play" the hit songs of the day—"Peacherine Rag," "Pleasant Moments" and "Nonpareil" and a couple of foxtrots and waltzes—which were recorded for the Museum by members of the U.S. Air Force Band.

NASM curators Thomas Crouch, Claudia Oakes and Richard Hallion have worked together on this exhibition with Deputy Director Melvin Zisfein and designer John Clendening. (See Torch story on exhibit design, September 1979.) Crouch, who coordinated the exhibit effort, originally suggested the idea of making the gallery a re-creation of a 1913 aviation show. "It seemed an obvious solution to the problem of displaying artifacts in a proper context," he said.

The idea is to give people the flavor of these early aeronautics expositions and to make the point that something was happening in aviation before the Wrights made their historic 1903 flight. So, the display includes illustrations of Leonardo da Vinci's Ornithopter, a machine with flapping wings, as well as his conception of a helicopter. There are also sketches of the Egyptian winged god, Khensu; the winged messenger of Greek mythology, Hermes; drawings based on ancient Chinese and Greek ideas for flying machines, and pre-Wright gliders such as the Lilenthal glider (1894).

NASM Archives

Pictures like this one, showing the Paris 1909 aviation show, inspired the ambiance of NASM's new Early Flight Gallery.

In a small theater tucked inside the gallery, a 25-minute silent film will be "narrated" by a mannequin. The film includes some National Archives footage, rarely seen by the public, of a flight in Paris in 1905. It's the first extant footage of an aircraft in flight (the Wright brothers' Kitty Hawk flight was recorded only with a still photograph).

There's also the first aerial film, shot in 1909 from a Wright plane in Italy. Tom Crouch, who did the film research as well as other projects, and NASM film reviewer Richard Crawford sat through some 20 hours of early flight footage before selecting these and other segments for the NASM film.

Among the planes wedged into the gallery are a 1908 Rinek Voisin, the Wright 1909 Military Flyer and a Curtiss Headless Pusher. The first pilot's license (belonging to aviator Glenn Curtiss), medals earned by the Wrights and Curtiss, posters advertising France's elegant Bleriot planes in England and six specially made 48-star American flags are also on display.

Three groups of talking mannequins add a touch of authenticity to the exhibit. However, Oakes said, writing the mannequins' scripts proved to be one of the toughest parts of the production.

Especially the give and take of the couple discussing women in aviation. A man is trying to talk his wife into taking flying lessons being offered near their home in Hempstead, N.Y. How would such a conversation go back in 1913? What Edwardian slang would they have used? Would a middle-class couple even be discussing flying back then? By the time the curators finished with that 2-minute script, they were, as the Edwardians would say, "in a flat spin" (translation: in a tizzy).

—Linda St. Thomas

Associates Road Show

By David Maxfield

MIAMI—The house lights go up. The curator thanks the audience for coming. And then: an enthusiastic burst of applause.

Another National Associates Regional Events lecture has concluded, this time here in Miami at the Museum of Science Inc., where Eleanor McMillan, supervisory conservator at the Smithsonian's Conservation Analytical Laboratory, has just presented a slide-illustrated journey through that lab. Along the way, the Florida audience saw how conservators have preserved and restored valuable and fragile prints, maps and drawings—as well as Dolley Madison's cookbook.

The goal of the Regional Events Program, according to Charlene James, its manager, is to give National Associates an opportunity to become better acquainted with the Institution and its staff. Through their activities, it is hoped, the participants will support their own local museums and other organizations that co-sponsor the programs. (One Miami resident, a Smithsonian contributing member, mentioned that, until attending a recent lecture, he had never been in a Miami museum.)

Though the objective may be simple, the administration and operation of the program is anything but. About 4 months each year, the program team travels from one U.S. city to another, either presenting a 10-day slate of lectures and seminars about Smithsonian activities or surveying areas where programs might be staged in the future.

Organization and dedication by the staff, who themselves are continuously "on stage" in the host cities, are essential to the effectiveness of the Regional Program. Traveling from Miami to San Antonio to Alaska this year, with stops also in Des Moines, Grand Rapids and other cities, the staff—usually three on the road at one time out of a five-member team—efficiently see to it that Smithsonian lecturers are at the right place at the right time, that necessary equipment is in place (and working), that local museum staff and officials are informed about scheduling and other plans and that lodging, transportation and related details are coordinated.

Eight-hour work days become 10- and 12-hour days. "Sometimes we do begin to fade," says James, "but when that happens, it is always the case that someone will come along and tell us what the Smithsonian means to them. You feel that."

How is all this organized? How does it work? Let's begin in Washington, a year or so before McMillan met her audience in Miami.

Step one. The Events' staff does its homework, taking a look at cities where large numbers of Smithsonian subscribers live, areas where the program had not been presented earlier. Available resources, such as names of cultural organizations and museums, are compiled, and Chambers of Commerce and other sources are contacted for basic demographic information about possible sites.

Two. Letters of introduction are sent to museum directors in the potential city. A visit by the Events' staff is arranged to explain the program, its goals and the responsibilities of co-sponsors. The staff then determines whether the "organizations want us." Once the nod is given, a tentative lecture schedule is put together and sent to the host city co-sponsors for approval.

Three. Nine months or so after initial planning and after scouting, invitational brochures describing the series (always approved by the co-sponsors) go to the Associates and the members of local cultural organizations. Tickets for each event are sent out with the help of the latest edition to the Events' family: a computer.

Four. Travel plans for the Smithsonian staff are worked out, lodging is lined up and press material is mailed out.

Five. The Events' team arrives in the host city for its 10-day stay. Throughout the period, the staff evaluates each program for attendance, audience reaction and community response in general. Following the tour, local co-sponsors are queried for their reaction as well as membership growth linked to the Regional Events Program.

And each year, members in one host city are sent detailed questionnaires and asked to evaluate the events. The results are considered an integral tool in planning future events.

Newsmakers

By Johnnie Douthis

NPG Director **Marvin Sadik** recently spoke to the Antiquarian Society in Montgomery, Ala., on "Three Centuries of American Faces."

Howard N. Fox, assistant curator for exhibitions at HMSG, participated as a panelist in a symposium on "Contemporary American Art: Developments and Directions" organized by the Virginia Museum of Fine Arts in Richmond.

Diane Blumenthal, cataloger with NPG's Catalog of American Portraits, delivered a lecture at the University of Alabama excerpted from her master's thesis, "The River as a Symbol in 19th Century Landscape Painting."

Madeleine Jacobs, science writer in the Office of Public Affairs, received third prize in the annual report category of the writing/editing competition sponsored by the Society for Technical Communication, Washington, D.C., chapter. The award was given for editing the National Bureau of Standards annual report.

Deborah Warner, curator in the Division of Physical Sciences at MHT, gave the Althea Stoekel Memorial Lecture at Ball State University in Indiana. Her subject was women's research in science.

Michael L. Lawson, NPG research historian, wrote a biography of artist/illustrator Boris Artzybasheff for a forthcoming volume of the Dictionary of American Biography published by Charles Scribner's Sons.

Zora Martin Felton, program manager for the Education Department at the Anacostia Neighborhood Museum, has been elected president of the University of the District of Columbia/Anacostia Project Advisory Committee. The group provides guidance on the educational projects to be carried out in Anacostia by UDC.

Silvio A. Bedini, keeper of rare books, was guest speaker at the U.S. Postal Service's first-day ceremony in Annapolis, Md., marking the issuance of a commemorative stamp honoring Benjamin Banneker, astronomer and mathematician.

Philip K. Ludeberg, curator of Naval History at MHT, was recently elected president of the U.S. Commission on Military History.

MS. PHOTOGENIC . . . *SI's Vichai Malikul took this picture of co-worker Caroline Herbert in her riding costume and won for her the title Ms. Photogenic of Maryland and for himself the honor, Photographer of the Year 1980, Maryland. Both Malikul and Herbert are scientific illustrators at MNH.*

NCFA staff members **Janet Flint,** curator of prints and drawings; **Lynda Hartigan,** assistant curator of 20th-century painting and sculpture, and **George Gurney,** curator of the "Sculpture and the Federal Triangle" exhibition at NCFA, were jurors for the "Prints and Small Sculpture" exhibition sponsored by the Washington Area Chapter of Artists Equity Association. The show opens in mid-March at the Art Gallery of Catholic University.

Andrea P. Stevens, SITES publications coordinator, received a master's degree in American studies from George Washington University in February. She has been attending graduate school part-time for several years.

Antonio Diez, administrative officer, gave a lecture to the Virginia Beach Art Association on the SITES exhibition, "Graphicas: Contemporary Latin American Prints."

Farouk El-Baz, director of NASM's Center for Earth and Planetary Studies, lectured on "Travels in China" during the Planetary Geology Principal Investigators Meeting held at the University of Arizona in Tempe.

Melvin B. Zisfein, deputy director at NASM, spoke at Iowa State University in Ames as part of his distinguished lecturer role with the American Institution of Aeronautics and Astronautics.

Paul Hanle of NASM's Science and Technology Department presented a paper on theoretical aerodynamics pioneers Theodore von Karman and Ludwig Prandtl at the California Institute of Technology.

Frank Greenwell, museum specialist in MNH's Department of Vertebrate Zoology, recently exhibited his color photographs at a Silver Spring gallery. His pictures of plants and animals were taken on field expeditions.

Harold "Doc" Dougherty, a technician in MNH's photo lab whose avocation is magic, stumped the audiences with his act at Georgetown's Cellar Door last month.

Yoshiaki Shimizu, curator of Japanese art at the Freer, gave a lecture on modern Japan at St. Paul's School in Concord, N.H., during Japan Week, held annually to celebrate the school's 30-year-old program of continuous attendance by Japanese boys and girls. Shimizu himself is an alumnus of St. Paul's.

As a guest of the Belgian government, RAP Director **Janet W. Solinger** visited Brussels in January to make final arrangements for the international symposium, "Belgium Today." RAP is one of three sponsors of the programs which begin in Washington on April 20.

The Office of Computer Services presented two Service Award Pins recently: one to **James Crockett,** manager of the Collections Management Division, for his 25 years of government service, and another to **Nancy Parsons,** management assistant, for her 20 years with the government. Crockett came to the Smithsonian in 1966 and Parsons joined the staff the following year.

Comings and Goings

James F. McGuire has been appointed chief of the Security Services Division of the Office of Protection Services.

McGuire retired last August from the FBI after serving as special agent in Chicago, Dayton, San Francisco and New York City. For 13 years before retirement, McGuire was manager of investigations at FBI headquarters in Washington.

McGuire was born and raised in Hamden, Conn., where he heard many stories of his great-grandfather's service as Hamden's first constable in the 1800s. He was a member of the second graduating class at Fairfield University in 1952. McGuire served two tours of duty with the United States Marine Corps.

Richard Holmeister

James McGuire

At the Smithsonian, McGuire will conduct investigations and security checks and provide advice on security matters. His staff includes Mary Gallion, William Shanahan, Frederick Jones and Richard Leaf. Division offices are in the Amtrak Building, Room 985, and the staff can be reached on ext. 4121.

Andrea Dupree, a CFA astrophysicist associated with Harvard's solar and stellar research programs since 1963, has been named Associate Director of the Solar and Stellar Physics Division, effective July 1.

Dupree succeeds **Robert Noyes,** who has served in that position since the formation of the Center in 1973. Noyes will return to full-time teaching and research.

A graduate of Wellesley, Dupree earned her Ph.D. degree from Harvard in 1968. From 1963 to 1979, she was associated with the Harvard College Observatory; last year she joined the SAO staff.

Dupree, a specialist in ultraviolet astronomy, has participated as an investigator on several satellite projects, including SAS-3 and Copernicus and, since 1978, has served as principal investigator and team leader for a series of Center-designed experiments aboard the International Ultraviolet Explorer (IUE) satellite.

Catherine Armstead and **Lucille Wade** retired in January from the MHT Office of Building Management after lengthy federal careers.

Armstead joined the Smithsonian staff as a custodial laborer in the Maintenance and Operations Office in 1948. During her more than 31 years at the Smithsonian, which included a tour at the Museum of Natural History, Armstead received citations as Employee of the Month and cash awards for superior performance.

Wade, a janitor foreman, transferred in 1975 from the GSA to MHT, where she remained until her retirement after more than 18 years of federal service.

Betty Teller is the newest exhibition coordinator at SITES. Teller received a master's degree in museum studies from George Washington University last May and was a free-lancer before coming to the Smithsonian.

Robert G. Tillotson has been appointed executive director of the newly reorganized philatelic collections at MHT. Tillotson has served as assistant director for administration at the Museum for the past 14 years. Before coming to Washington, he was a museum administrator at the Toledo Museum of Art and the Los Angeles County Museum of Art. The Division of Postal History has been redesignated as a national collection, with Tillotson reporting directly to Museum chief Roger G. Kennedy.

New additions at NASM are **Cheryl Gilliam** as administrative clerk and **Brien Smith** as museum technician in the Registrar's Office. Smith comes to Washington from Berlin, where he worked for Army Military Intelligence.

Andrew Chaiken, geology research assistant with NASM's Center for Earth and Planetary Studies, has resigned.

Richard Holmeister

Computer Services Director Stanley Kovy donates blood.

Staff Tops Red Cross Goal

A success story was written in January when Smithsonian employees contributed 134 percent of our goal of 75 units of blood to the Red Cross. As a result, the organization was able to supply 101 blood units to area hospitals at a time made critical by the drastic drop in donations during the holiday season.

Judith Johnson of the Red Cross expressed appreciation: ". . . At any time, such a performance would be outstanding; at a time, however, when blood supplies are at a low and the Red Cross is on emergency appeal, appreciation for such a contribution cannot be adequately expressed. . . ."

Dorothy Glenn, Personnel Office coordinator for the bloodmobiles, has organized the next blood donation day for Monday, March 24, between 9 a.m. and 3 p.m. in classrooms A, B and C of the Natural History Building Learning Center. Interested employees should call ext 6271 for an appointment.

But the Red Cross needs donations of money and time, too. President Carter has proclaimed March as Red Cross Month. The urgency of the organization's need for assistance is due to vast amounts expended for disaster relief last summer. Although the American Red Cross is part of the federal government's Combined Federal Campaign, approximately half of its 3,000 chapters annually raise all their funds in March. The president urges employees to provide financial support, volunteer free time and donate blood for the ill and injured of the area.—*Kathryn Lindeman*

Via Krantz

Collins inspects an Eskimo carved ivory ornament.

Still Digging Into Man's Past

By Thomas Harney

Now in his 56th year at the Smithsonian, Dr. Henry Collins is still actively pursuing research on ancient man in the laboratories of the Museum of Natural History.

Collins, born in southeastern Alabama, was an enthusiastic geology major at a small Mississippi college when he wrote to Smithsonian Secretary Charles Walcott to ask about the chances of accompanying the scientist on one of his annual geological expeditions to British Columbia.

Things worked out—but not as Collins planned: When he stopped in at the Smithsonian to meet Walcott, Collins was sent to be interviewed by Neil Judd, a scientist at the now-defunct U.S. National Museum, for a summer job at an archaeological excavation at Chaco Canyon, N.M.

Judd was a man of few words and a dry wit. He asked Collins three questions. "Young man, do you know anything about American Indian pottery?" "No," Collins replied. "Do you know anything about the Indians of the Southwest?" "No." "Can you cook?" "No." "Young man," Judd said, "I like the way you talk. I'm going to hire you."

Despite misgivings about being detoured into an unknown field, Collins took the job. He spent the next three summers—1922, 1923 and 1924—at Chaco Canyon where Judd was conducting an intensive study at Pueblo Bonito, a 500-room prehistoric Indian ruin. "I soon got hooked on archaeology," he recalls. In the winter of 1924, he took an examination for a position as an aide in the U.S. National Museum's Division of Ethnology and was accepted.

At the onset of his Smithsonian career, Collins' main interest was in the archaeology of his native Southeast, a region whose prehistoric past had not yet been unraveled. One of his early achievements was identifying for the first time the type of pottery found at historic Choctaw villages in Mississippi. It was the first twist of the key unlocking the chronology of Sou easter Indian prehistory.

For this discovery, as well as for the series of other remarkable "firsts" in the Southeast, Collins was honored last month by the Lower Mississippi Survey, an organization of archaeologists from Harvard specializing in Southeastern archaeological studies.

In 1927 Collins began to turn away from the Southeast and focus his attention on Eskimo prehistory in the far North. His interest in the Arctic was initially aroused by Ales Hrdlicka, a Smithsonian physical anthropologist, who had been to Alaska in 1926 to search for traces of early man.

Urged on by Hrdlicka, Collins started to search for sites of the old Bering Sea Culture. In 1930 he narrowed his search to the Eskimo village of Gambell on the northwestern tip of St. Lawrence island, where on a clear day the coast of Siberia was visible. "There, I hit the jackpot," he said.

At five Gambell sites, each of a different age, situated on a series of old beach lines, Collins excavated evidence of an unbroken sequence of Eskimo culture change going back 2,000 years. These five sites revealed a complete cross section of Eskimo prehistory.

At the oldest, the harpoon heads and other implements were decorated with the elaborate designs of Old Bering Sea art, the mark of a culture that we now know with certainty originated in Siberia and spread westward into northern maritime Alaska. At younger Gambell sites, the forms of implements changed and the art became gradually simpler, evolving finally into the one simple utilitarian form used by modern Eskimos.

When Collins began his Arctic field work, there was dispute over the origin of the Eskimos and Eskimo culture, but his discoveries on St. Lawrence Island and other excavations in Alaska and the Canadian Arctic in the '30s, '40s and '50s enabled Collins to work out the first authoritative solutions to a complicated prehistoric problem. For this he was awarded the Gold Medal of the Royal Danish Academy of Sciences and Letters.

Today, as the acknowledged dean of American Arctic archaeologists, he is still working with the Museum's collections and publishing in his field—such as his catalog essay on Eskimo art for the National Gallery of Art exhibit on "The Far North."

Payne-Gaposchkin

Cecilia H. Payne-Gaposchkin, Phillips Professor Emerita of Astronomy at Harvard University and an astronomer at the Smithsonian Astrophysical Observatory, died on Dec. 6 at the age of 79.

Dr. Payne-Gaposchkin, the first tenured woman professor at Harvard, was noted for her research on variable stars. Her findings not only led to a much better understanding of how and why such stars change their brightness, but also provided important clues to the structure of the Milky Way and thousands of other galaxies.

Dr. Payne-Gaposchkin, also the first woman to earn a doctorate in astronomy from Harvard, chaired the University's Department of Astronomy from 1956 to 1960.

In the 1930s, she and her husband, Sergei, made several million observations of thousands of variable stars.

"From her work on variable stars, Cecilia contributed a great deal to the model of the nova as an exploding star," Center for Astrophysics Director George Field said. "Since her pioneering work, we've discovered why this explosion takes place and how the novae (exploding stars) fit into the current picture of stellar evolution."

She was also "considered a superb lecturer," her CFA colleague Charles Whitney said, "because she was able to convey the same sense of wonder that she felt to her audience. They were simply swept along by her enthusiasm."

SI in the Media

By Johnnie Douthis

"The Sovereign Smithsonian" was the title of a glowing article in the February Town and Country. The Smithsonian, journalist Nan Tillson Birmingham wrote, is "a very American kingdom . . . the storehouse of our heritage, vault of our treasures, guardian of our culture, catchall of our follies, showcase of our technological feats, national classroom, amusement park and laboratory."

Remembering the Movement

Local dailies devoted considerable space to the DPA-sponsored conference on the civil rights movement of the '60s, dwelling on the commitment of the individual crusaders. The New York Times wrote of "foot soldiers" of the movement and their life styles today. Other coverage included AP and CBS Monday Morning News interviews with **Bernice Reagon,** director of DPA's Black American Culture Program and organizer of the conferences. Local radio station WPFW-FM ran a 1-hour show on DPA's latest recording, "Voices of the Civil Rights Movement: Black American Freedom Songs, 1960-66."

The Stuarts

Both the Post and Star reported on Feb. 7 that "a Solomonic compromise" (the Post's phrase) was in the works on Gilbert Stuart's George and Martha Washington under which the portraits would be shared by NPG and the Boston Museum of Fine Arts—3 years at one museum, 3 years at the other.

In the Attic

The Smithsonian as the nation's attic continues to be a favorite journalistic subject. A recent Washington Star article took readers on a tour of the real storage area—the Silver Hill facility—and described some of the many objects there, ranging from the Enola Gay to space suits.

Science

An AP story on an NZP study on inbreeding among zoo animals was carried by many newspapers, including the Washington Post, Detroit Free Press and the Minneapolis Tribune. Stories on the study also appeared in Science and Science News magazines and the New York Times. Two Virginia papers developed editorials on the subject.

A New York Times article detailed studies by MNH scientist **Meredith L. Jones** on a mysterious 5½-foot tube worm with no eyes, mouth, gut or anus. According to the article, taxonomists are baffled by the mysterious animal and have not yet placed it in a scientific classification. Jones is quoted as saying, "Once you get past the animal's basic description, 'simple' has no place in your vocabulary."

A Washington Post reporter wrote about the information he and his children gained from a visit to MNH's Naturalist Center. The article noted the important job the Center is doing in filling the information gap often experienced by visitors who want to know more about a subject.

Bird Paintings

Paul Richard, the Post's art critic, thought "splendid" the craftsmanship of the paintings in NCFA's "Birds: Works from the 1979 Annual Exhibition of Art Depicting Birds," but lamented "the sameness of these pictures."

Design and Crafts

"Maybe they don't use real money in Tennessee," Sarah Booth Conroy wrote in a Washington Post article on a sales exhibition at the Renwick's museum shop. She was referring to the low cost of the displayed Tennessee pottery which was half sold out 2 days after the exhibit opened.

Ada Louise Huxtable, New York Times architecture critic, found the ocean liner exhibit at Cooper-Hewitt a thoughtful analysis of the design aspects of the big ships. She also had words of praise for the catalog by curator Richard B. Oliver.

Elizabeth Stevens, Baltimore Sun art critic, thought the "Sculpture and the Federal Triangle" show at NCFA "performed an extremely valuable service by helping us look back at the 1930s—not just as history, but as a period of artistic and architectural achievement."

Smithsonian People

Featured recently: NASM Director **Noel W. Hinners,** profiled in the Washington Star; **Riccardo Giacconi,** associate director for high energy astrophysics at CFA, in the January issue of "Star and Sky"; MHT curator **Bernard Finn,** interviewed by Eric Sevareid for a 1-hour TV special on Thomas Edison.

Also, "Message to Moths: Trick or Perish," in Audubon magazine,was written and illustrated by MNH Biological Motion Picture Producer **Kjell B. Sandved;** CFA astronomer **John Huchra,** profiled in the Feb. 5 issue of Us magazine; an article on research by MNH botanist **Thomas Soderstrom** on a worldwide bamboo bloom appeared in Gareten Praxis, a leading German plant magazine.

Also, a story in the Elkins (W.Va.) Inter-Mountain on NASM Historian Emeritus **Paul Garber**'s lecture series on modern flight, given at Elkins College; an article on artist Chesley Bonestell in Omni magazine written by NASM Director of Astronautics **Frederick C. Durant,** and a piece on spider research by STRI arachnologist **William G. Eberhard** published in Natural History magazine.

Calendar

The Smithsonian Calendar for April will appear in the Washington Post and the Washington Star on Friday, March 21.

Happy Birthday

Docents in the Museum of Natural History last month celebrated the 25th anniversary of the docent program, begun at the Smithsonian in 1954 by a group of Junior League women. In that year, MNH Docent Coordinator Magda Schremp says, the group of women, who had worked individually behind the scenes, banded together and formalized their activities. They wrote scripts for the tours by going from case to case and recording each item. Schremp and her docents have been unable to locate any records concerning docents between 1954 and 1964, but records for 1964 show a total of 43 docents, compared with 300 now in the MNH alone.

Richard Holmgren

Phyllis and Paul Spangler cut the ice.

Sports

Skating: Phyllis and Paul Spangler, both from Natural History's Department of Entomology, skate together almost every winter day at the rink on the Mall. Washingtonians got a look at Phyllis cutting a fine figure in the Post Weekend Section on Jan. 18. She and her husband join a crowd of Smithsonian people who attend one of the three hour-long shifts: 11-12, 12:15-1:15 and 1:30-2:30. Fees are $1.25 per hour ($2.35 for 2 hours) and skates are available for rental.

Running: The SI team won first prize in December's 3,000-meter Inter-agency trophy run. Some 20 Smithsonian runners participated. Mike Bradley (SSIE) captured second place with a time of 9:31. Bob Harper (SSIE) was fifth with a 9:38 and Joe Donoghue (MNH) was eighth, 9:51. Val Lewton (NFCA) finished in 10:05 and Tom Bold (SSIE) ran the course in 10:11.

Representing NZP in January's inter-agency race were Ron Evans, Peter Mann, Richard Montali and Willie Peratino, who ran in the 3,000-meter event, and Mitchell Bush and John Mallen who entered the 6,000-meter race.

Basketball: As of Torch deadline, the SI team had an 8-0 record with recent victories over Group Health Insurance, the Running Wild Bunch (another SI team) and Sheraton Washington. The Running Wild Bunch had a record of 4-4.

Softball: Men's slow-pitch softball begins in late March. For information, contact Nat Gramblin, ext. 5831.—*Louise H. Hull*

Cooper-Hewitt's Antique Series

The Smithsonian Illustrated Library of Antiques, a new, comprehensive series of books on the history, design and collection of antiques, including rugs, prints, furniture, glass and silver, is being published by the Smithsonian's Cooper-Hewitt Museum in New York City in association with Book-of-the-Month Club Inc.

The series offers the first extensive look in published form at the Cooper-Hewitt collections.

Each volume in the 12-edition series covers the social, technical and stylistic development of a single, major area of antiques. Six titles have been issued to date: *Oriental Rugs, Porcelain, Glass, Needlework, Prints* and *Furniture 1*.

Three years in the making by a team of writers, researchers and editors, the books are available at the Cooper-Hewitt Museum Shop, Smithsonian museum shops in Washington and to Smithsonian Magazine and Book-of-the-Month Club subscribers. Each volume is $9.95 ($8.95 to Smithsonian Associates), plus $1 for postage and handling if purchased by mail.

Solicitations for the series were sent in February to Smithsonian magazine subscribers and to about 1 million Book-of-the-Month Club members, beginning Jan 31.

The fully illustrated guides are designed for use by both the novice and the experienced collector of antiques. And the series, because it treats each of the major antiques categories separately, will function as a basic reference library.

The editions include abundant photographs of objects from the Smithsonian and other museum collections. Many have never before been photographed.

Future volumes will cover bibelots, clocks, jewelry, pottery, silver and a second volume on furniture.

General editor for the Smithsonian series is Brenda Gilchrist, who joined the Museum staff in 1976. Gloria Norris is the project's director for Book-of-the-Month Club. The individual volumes were written by authors selected for their expert knowledge of subject areas as well as for their ability to present information clearly and entertainingly. —*David Maxfield*

'BOOT IN HAND' . . . *by Lucien Pompili is one of the contemporary works (1974) in "A Century of Ceramics in the United States, 1878-1978," on view at the Cooper-Hewitt Museum until May 25. The traveling exhibition, organized by the Everson Museum of Art in Syracuse, N.Y. features more than 200 works in clay by more than 100 artists. The Cooper-Hewitt showing was organized by David McFadden, curator of decorative arts.*

Decorative Arts

Decorative arts fans now have their own association at the Cooper-Hewitt Museum in New York. The Decorative Arts Association, launched in May 1979, is open to all Cooper-Hewitt members who are especially interested in the study of this field.

The association sponsors lectures, seminars and tours of private collections and offers its members previews of Cooper-Hewitt exhibitions.

For more information, write to David McFadden, Curator of Decorative Arts, Cooper-Hewitt Museum, 2 East 91st St., New York, N.Y. 10028 or call (212) 860-6868.

Career Planning At African Art

The Museum of African Art last month presented its second annual 2-day seminar, "Careers in Museums," free to 55 area high school seniors and college freshmen.

K. O. Fowler, an intern in the Museum Education Graduate Program at George Washington University, coordinated the seminar under the direction of Education Department head Amina Dickerson.

The first day's sessions were devoted to work roles—curator, conservator, archivist—necessary to a museum's central functions of collecting, preserving and interpreting objects. Guest speaker Adolphus Ealey, director of the Barnett-Aden Gallery in the District, addressed the question "What Is a Museum?"

Exhibits designer Kenneth Young from Exhibits Central; Riddick Vann, Natural History Museum exhibits designer, and Judy Walsh, a National Gallery paper conservator, gave slide presentations and answered questions from the students.

MAA staffers Marietta Joseph and Rene Welfeld also made presentations in the curatorial session, along with Edith Martin, retired museum technician from the Renwick Gallery.

The second day's activities focused on administrative and managerial support positions needed to keep a museum running smoothly—legal advisor, accountant, building manager, security chief, etc.

MAA Director Warren Robbins discussed the administration of museums in general and how MAA was formed. Dorothy Kapstein, Boutique Africa manager, spoke about managing a museum shop. Also participating were Operations Manager Basil Arendse, Richard Wechsler on public relations, Jean Salan on fundraising, Mary Lynn Perry on membership and volunteers, Amina Dickerson on education programs, Docent Coordinator Gretchen Jennings, Librarian Janet Stanley, Archives Assistant Dodie Huete and Workshop Facilitator Alicia Taylor.

Museum educators Susan Friend, from the National Visitor Center, and Joy Norman, American Association of Museums, gave students information on schools to investigate, books and other publications to read and necessary skills to acquire. —*Kathryn Lindeman*

Q & A

"It's okay to blink and breathe . . . blink and breathe. . . ." But that's about all, says Cordell Dickerson, photographer in the Museum Shops' tintype studio in the Arts and Industries Building. Subjects who sit for tintypes taken by Dickerson and co-worker Bob Bradley must hold a pose, "without moving a muscle," for 15-20 seconds.

Dickerson, who spends his working hours surrounded by costume racks, bright lights and a 19th-century backdrop, got serious about cameras at age 16. "I kept asking a photographer friend, 'How do you you do that?' and finally he showed me the basics. I took my grandma's Brownie, photographed the levees close to my home in New Orleans and put the pictures up on my walls. I've done a lot of reading and studying since then."

Dickerson, who came to the Smithsonian in 1976, was interviewed by Torch staff writer Kathryn Lindeman.

Q. *Which are the favorite costumes?*
A. The Confederate outfits are the most popular with the men. The West Point cadet coat, also gray and much like the Confederate uniform, is a favorite, and the top hat is, too. The ladies like the dress that weighs 7 pounds and looks like something Scarlet O'Hara would wear. It was even heavier before we took the hoop out of the skirt—the customers couldn't walk in it. You'd be amazed, though, how many people don't realize we're trying to re-create the Victorian period. They're disappointed because we don't have cowboy and Indian costumes or something from the St. Valentine's Day Massacre. After all, the sign on the building says 1876!

Q. *Do customers like the finished product?*
A. Many are really disappointed; others love them. Even though we show them samples and explain the characteristics of the plates in advance, we get comments like, "You mean they're not in color?!" Some people think there were always Fotomats, color photos and pictures that pop out of a camera in seconds.

Q. *Who makes the best subject?*
A. One person alone is the easiest subject, and you can be more creative. But we get a lot of requests for group shots, especially families. It's very difficult with kids because they seldom remain still long enough—they end up looking like bowls of Jello in a high wind. With a group shot, we have to insist on a maximum of four people—no more will fit in one row in the 4-by-5-inch plate. We really can't set up a pose with people in more than one row because some of them would be out of focus. We try to use old-fashioned formal poses.

Q. *Do you get many local customers?*
A. Most of them are out-of-towners, but we get some local visitors who hear about us by word of mouth. Many people from foreign countries love the tintypes. It makes you feel good to know you have pictures in Spain, Scotland, all over the world.

Q. *How close to the original tintype process is the modern one you use?*
A. It's as close as possible, but we use aluminum plates unlike the old ones which were actually iron, not tin.

Early photographers had skylights in the ceiling. The lights we use are so bright that people out in the exhibit hall think we're putting on a play or performance.

Our camera is just a modern lens mounted in an old box. But even with new technology, you never know exactly what you're going to get.

Richard Hollinger

Cordell Dickerson in his Victorian photo parlor

Drawing by Kathryn Meehan

Flora Smithiantha

By James Buckler

An antique, cast-iron garden settee may look hard, uncomfortable and cold, but when you choose the right one, you'll find it surprisingly restful. Besides, such pieces of furniture evoke memories of an exciting period in American history—the last half of the 19th century.

The Industrial Revolution was in full swing and almost anything could be mass produced, especially if made of iron. New products were trumpeted in the ironworks catalogs which homeowners consulted alternately with popular "tastemaker" books.

Basic design styles changed very little over the period—most foundries cast similar styles and freely pirated designs from each other. Some had facilities for custom casting, but most often the style would originate in England, quickly copied in America.

The garden furniture collection of the Office of Horticulture, now numbering 130 pieces, was begun in 1975. Horticulture has examples of the most widely cast seating styles, including gothic, grape, rustic and curtain, and also a rare quatrefoil and a scroll.

One of the best sources for cast-iron pieces used to be old cemeteries, which were in a sense America's first public parks. Families often placed urns, chairs and settees as memorials at the gravesites. Two of SI's curtain-style chairs came from a cemetery in Brooklyn, via Alexandria, as a gift from the daughter of a cemetery manager.

The Smithsonian's largest and most dramatic urn sits in the center of the Commons. Cast circa 1860-1880, it boasts three forbidding griffins supporting a maesive bowl. The J. W. Fiske fountain in the Victorian Garden came from an estate in Virginia, along with the interesting reddish-brown urn on the west terrace of the Arts and Industries Building.

As in any antiques collection, authenticated, labeled pieces are most desirable and Horticulture is fortunate to have examples from the foundries of J. L. Mott, J. W. Fiske, Kramer Bros., McLean and Peter Timmes Son. If you are considering acquiring a cast-iron or iron wire object which is being represented as an antique, make sure it's not fake.

Tracking down the source is impossible if there is no label or founder's mark on the object. Approximate dates can be determined by comparing your purchase with the illustrations in an original catalog, the most valuable research tool, or by consultation with an expert.

Once you acquire your piece, it is important to give it proper care. Cast iron and iron wire are brittle and will not take abuse. Such items should be cleaned and painted once a year with a good rust-preventive paint.

With the increasing interest in Victoriana, prices are soaring and supplies are limited. It is still possible, however, to find pieces on the market at a reasonable price. Look for a source who still considers them hard, uncomfortable and cold.

Cooking Up Plans for Museum Archives

The idea, Arthur Breton now remembers, came to him in Buffalo. At the airport.

Breton, curator of manuscripts et the Archives of American Art, had visited the Albright-Knox Art Gallery in that city to see what kind of archival system the museum had set up and what might be needed in the future. "But what I encountered was really no system at all," he says. "I didn't know how to advise them."

The Archives, as part of its mission to preserve the original documents of art history, is interested in the records kept by art museums, in addition to those belonging to artists, dealers and private galleries. At first, the Archives had planned to microfilm museum records—to set up a program for a museum, in effect—but, after Breton's look at Albright-Knox, all this was to change.

"At the airport I thought: This is only one museum. That was the beginning of the idea that our role should be one of helping museums set up their own programs rather than doing it for them."

Out of this thinking came a museum archives seminar held this winter at the Belmont Conference Center in Elkridge, Md. Attending were 23 museum and archives professionals from the United States and Canada. And out of the seminar came 11 guidelines (now in draft form) that a museum could follow in setting up an archives program.

Historically, museums in general have not taken care of their records, he points out. "The Museum of Modern Art, for example, has no archivist. Neither does the Los Angeles Museum of Art nor the Wadsworth Athenaeum in Hartfd, Conn., one of the oldest public museums. In many cases, directors just have not thought about this need."

But there is change coming. Among the museums that have recently established archives programs are the Philadelphia Academy of Fine Arts, the Detroit Institute of Arts, the St. Louis Art Museum, the Cincinnati Art Museum and the National Gallery of Canada.

"We could see this starting," Breton says, "and at the Archives we were interested in maintaining some sort of leadership role. Because of our work, we were in the position to do that." Besides the Belmont conference, funded by the Office of Public Service, a museum archives workshop will be held July 14-18, sponsored by the Office of Museum Programs.

Among the recommendations proposed at Belmont for budding archival programs were these:

- Museums must determine how long and under what conditions particular records are to be preserved. (Criteria for preservation include: value for the history of the museum, evidence of administrative structure and evolution, legal and fiscal value and general research and informational value.)

- Archives should be located in separate and secure areas of museums and not below ground.

- The museums should have professional, trained archivists, but if funds are not available, outside expert advice should be sought and archival training provided to appropriate staff members.

- Records should be available to staff members, scholars and others for research purposes. And the museum should have a policy statement clarifying the difference between official records of the museum and those that might be considered the property of curators and others.

—David M. Maxfield

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SI Presents Goals For '81 To Congress

By David M. Maxfield

The Smithsonian's 1981 federal budget, a $137.4 million request examined by a House appropriations Interior subcommittee March 11-12, contains a number of "initiatives" that Secretary Ripley believes "will be of great interest to the public, in Washington and throughout the country."

In a statement presented to the panel, chaired by Rep. Sidney R. Yates (D.-Ill.), Ripley said the $13.1 million requested above last year's budget would permit the Smithsonian to "meet essential operating requirements, to build upon and strengthen many programs begun in prior years and to undertake new initiatives."

The new programs center on three major exhibitions now in the planning stages:

- At the Museum of History and Technology, "a definitive exhibition" re-examining George Washington's place in U.S. history is scheduled for 1982, the 250th anniversary of the first president's birth.
- At the Renwick Gallery, work on "Celebration," the first comprehensive display of folk objects drawn from all the Smithsonian's museums, is now beginning. For the MHT and Renwick shows, $1 million is requested for 1981.

"We have not requested new resources for substantial new exhibitions since the Bicentennial," Ripley said, "because emphasis over the past several years has

(See '1981 Budget,' Page 2.)

Ralfe Baggett

The bulky switchboard at MHT will be replaced by compact tabletop stations.

'Bye to 381: Phone Numbers Change June 2

By Linda St. Thomas

When you come into work on Monday morning, June 2, you'll notice that there's a new number written on the dial card of your telephone. If you work in a Mall building, the number will begin with "357" instead of the old "381" exchange to which you've grown accustomed over the years.

After five years of planning, the Smithsonian will replace its old electromechanical phone system, installed in 1963, with the Bell System's modern Centrex II. The change to new phone numbers will take place over the May 31 weekend. After the initial number conversion, most dial telephones will be replaced with touch-tone equipment building by building, over the summer months.

All Smithsonian facilities in Washington will get new numbers. Although there will be three exchanges (357, 479 and 745), there will be only a single system. The prefix for numbers at the Zoo and Barney House will be 745; the Museum of African Art, Anacostia Neighborhood Museum and offices at L'Enfant Plaza will use 479, and all other buildings, including the Mall museums, Renwick, the bureaus in the old Patent Office Building—National Portrait Gallery, National Collection of Fine Arts and Archives of American Art—and the 1111 North Capitol St. facility, will use 357. The Smithsonian's main number will be 357-1300.

Phones outside of Washington (the Radiation Biology Lab in Rockville, the Chesapeake Bay Center in Edgewater, etc.) will keep their present numbers.

The Centrex system will make things a lot easier for Smithsonian employees, who made a total of roughly 1.9 million local calls and 600,000 long-distance calls last year. For SI Communications Chief John Moreci, Manager Ann Gilstrap and the telephone operators in the Museum of History and Technology, Centrex will alleviate space problems and make a slew of telephone numbers available to serve Smithsonian needs.

"Our entire phone system has been jammed into a few rooms and the hallway in the fourth floor of MHT and there's just no room to expand," Moreci explains. "If we could expand the phone operation physically, we could get more numbers. We are close to using all our possible phone number combinations," he said. "Actually, we have fewer than 15 numbers available for assignment between now and June."

With the Centrex system, the "hardware" is to be moved from SI property to the C&P facilities in Washington. What will remain here are some 4,500 phones, the telephone "closets" and the operators' office.

Until now, the last four digits of all Smithsonian phone numbers (with the 381 exchange), had to begin with 4, 5, 6 or 7. The number 1 was reserved at one time for federal interagency calls, 2 and 3 were used by another organization, 8 is the FTS line, 9

(See 'Telephones,' Page 3.)

Talk Isn't Cheap

Smithsonian's monthly phone bill, for local service only, comes to $70,000—try working that into your household budget. Since 1963, SI has added an average of 75 new phone lines per year, with great surges in the years when new museums opened. For instance, in 1976 when NASM opened, the Smithsonian had to add 400 new lines to its telephone system.

Jessie Cohen

BRANCHING OUT . . . *Tree climber David Gregg swings clear on his ropes after topping a 110-foot sycamore tree at the National Zoo. The NZP tree maintenance crew—three climbers and two groundmen—stays busy year round trimming and removing diseased, downed or dangerous trees in the 167-acre park.*

Sneak Preview

Frequently Called Services	Old	New
Smithsonian Institution (main number)	628-4422	357-1300
Visitor Information	381-6264	357-2700
Dial-a-Museum	737-8811	357-2020
Dial-a-Phenomenon	737-8855	357-2000
Dial-a-Job	381-6545	357-1452
Personnel	381-5736	357-2465
DPA Box Office	381-5395	357-1500
Credit Union	381-6411	357-2981
Duplicating Office (1111 N. Capitol St.)	381-4161	357-1497
Dispatcher	381-6444	357-3003
Parking	381-5484	357-2230
Protection Services	381-6496	357-3062
Messenger Service	381-6667	357-3201
Secretary Ripley's Office	381-5005	357-1846
Payroll	381-6191	479-3367
Museum Shops	381-5033	357-1805
Resident Associates	381-5157	357-3030
National Associates	381-6264	357-2700
The Torch	381-5911	357-2627
Employee Union (Local 2463)	381-5570	357-2312
Smithsonian Station, U.S. Post Office	381-6464	357-3029

The new numbers will become effective on June 2.

View From India

The Harvard-Smithsonian Center for Astrophysics participated in an experiment at the Kapal-Rangapur Observatory in India on the solar corona at the time of the decade's first solar eclipse on Feb. 16.

The experiment, conducted in cooperation with the Sacramento Peak Observatory, gathered spectroscopic data which may help unravel the role played by the outpourings of energy and material known as coronal loops in the sun's energy processes.

On the same day, halfway around the world, a joint solar experiment of the CFA and the High Altitude Observatory was carried out from a rocket launched at the White Sands Missile Range in New Mexico. The artificial eclipses produced by this experiment were termed a "tremendous success" by John Kohl, principal investigator for the CFA Lyman Alpha Coronagraph.

Observations by that instrument and a White Light Coronagraph prepared by the HAO established a new upper limit for the velocity of the solar wind streaming from coronal holes: about 150 kilometers per second. Because the rocket was flown within 7½ hours after the natural solar eclipse, the data could be correlated with information gathered from ground-based experiments.

Public Information Specialist Bill Waller was at Rangapur-Japal Observatory covering the eclipse event for CFA, Sky and Telescope magazine and Science Digest. Jack Wiley of Smithsonian magazine viewed the eclipse over Africa aboard a jet aircraft sponsored by Los Alamos Labs, and Peter Seitel of the Folklore Program studied the reaction of African natives to the eclipse.

Back in Cambridge, CFA's Robert Noyes will join in the analysis of the data gathered at Japal-Rangapur.

Winning Campaign

The overall 1980 Combined Federal Campaign went over the top by 11 percent. The Institution won praise from Campaign Director William A. Schaeffler for raising $70,000, up 48 percent from its 1979 tally. In a memorandum to all employees, Assistant Secretary for Administration John Jameson thanked supervisors, coordinators and keyworkers, the Union and all employees who contributed to the campaign's success.

Art Deco figurine made by J. B. Gauvenet in 1925, an illustration from the SITES catalog, Sevres Porcelain. *The book accompanies an exhibition which opened in Chicago last month.*

A Porcelain Collector's Delight

The first English-language publication on the history of Sevres porcelain from its beginning in 1738 to the present has been published by SI Press for the Smithsonian Traveling Exhibition Service.

The 96-page catalog accompanies SITES' new exhibition, "Sevres Porcelain," which began a one-year tour at the Art Institute of Chicago on March 8.

Sevres Porcelain contains a foreword by Secretary Ripley, a preface and introduction by Jean Mathieu, director of the National Manufactory of Sevres, and a 22-page essay by Tamara Preaud, director of the Manufactory's Archival Service. Preaud is considered the world's foremost authority on the topic of Sevres porcelain.

Of most interest to collectors will be the three appendixes. The first is a fully illustrated, detailed description of the process that goes into the making of the paste and the shaping and decoration of the porcelain, the second shows illustrations of the different marks used by the Manufactory and the last is a list of international exhibitions between 1884 and the present.

SI and Boston Agree to Share

The Smithsonian and the Boston Museum of Fine Arts have agreed jointly to purchase the Gilbert Stuart portraits of George and Martha Washington from the Boston Athenaeum and to exhibit them on a three-year alternating basis in Boston and at the National Portrait Gallery.

The agreement, following almost a year of discussions, is subject to review by the Massachusetts attorney general and the approval of the state Probate Court.

Howard W. Johnson, president of the Boston Museum of Fine Arts, said in a formal announcement that the agreement "serves the best interests of the public both in Massachusetts and the nation."

"... the Smithsonian and the Athenaeum," he continued, "have been most cooperative in working out this agreement, and we especially appreciate the contribution of the Smithsonian toward the joint ownership arrangement."

The Providence Journal hailed the agreement "as a happy compromise .... Reasonable men have given ground and the victory belongs to all. So let it be."

George Washington always liked traveling, the Quincy (Mass.) Patriot-Ledger wrote, "and both Martha and he should enjoy the opportunity to visit the city which bears their name."

The portraits, painted from life during Washington's second presidential term and later copied many times by Stuart himself, were sold to the Athenaeum in 1831 by Stuart's widow and daughter and, beginning in 1876, were on loan to the Boston Museum.

The Athenaeum, whose offer in 1974 to sell the paintings to the Boston Museum was not accepted, began negotiations with NPG in 1978. When these negotiations became known in April '79, a campaign was launched in Boston to retain the paintings in that city. Recognizing the intensity of interest among Bostonians, the Smithsonian agreed with the Athenaeum to suspend negotiations until the end of the year.

Under the agreement announced in Boston, the Athenaeum is to receive $4,875,000 for the portraits, $2,125,000 from the Boston Museum and $2,750,000 from the Smithsonian. The Smithsonian's portion will consist entirely of trust funds.

Providing the agreement is approved by the Massachusetts legal authorities, the paintings are expected to reach Washington in May and to go on exhibit at NPG in July.

'1981 Budget' *(Continued from Page 1)*

been on critical collections management needs. It is time, however, to breathe new life into our exhibit halls. . . ."

• A major interdisciplinary science project, called the Smithsonian National Awareness Program, is also planned. Through exhibitions at the Air and Space and Natural History museums and by supporting educational materials, the program will explore major problems confronting the natural environment. A request of $600,000 was presented for planning the twin exhibits.

The budget for fiscal 1981 called for funding other Smithsonian priorities. Among these are continued construction at the Zoo ($2.2 million) and the Front Royal Conservation Center ($1 million); restoration and renovation of existing buildings, among them the Renwick and Arts and Industries ($8.8 million), and planning of the South Quadrangle project as the site for new African and Asian art facilities ($500,000).

High priority in '81 will also be given to the Tropical Research Institute, designated in the Panama Canal Treaty and related agreements as custodian of the Barro Colorado Nature Monument, a 12,000-acre nature preserve, enlarged from its original 3,900 acres, in the Republic of Panama. An additional $472,000 above the fiscal 1980 budget for STRI was budgeted to meet new security, conservation and educational programs stemming from the treaty.

Attention in 1981 will be given to operational needs such as planning collections storage, conservation, protection and other equipment for the new Museum Support Center. A request of $2.4 million is calculated this year.

To help offset inflationary costs plaguing museum programs, the Smithsonian, for the first time, is requesting a $1.2 million allowance that would help research, exhibition and other programs maintain current operation levels.

For fiscal 1981, the budget calls for fund increases that will strengthen additional Institution programs. Among these are:

• The watershed monitoring system at the Chesapeake Bay Center for Environmental Studies.

• A telescope detector development program at the Astrophysical Observatory in Cambridge.

• The 19th-century American art program at the National Collection of Fine Arts.

• Inventory collections work at MHT.

• Public accessibility to the library collections at Cooper-Hewitt.

• New exhibition programs at the Freer Gallery of Art and the National Portrait Gallery.

• Public performances at MHT making use of its collection of musical instruments.

On other matters, the Smithsonian expressed its interest in obtaining from the General Services Administration the old Tariff Building in downtown Washington for new exhibition and storage space to be used by NPG and NCFA. The building now houses the International Trade Commission, which would be relocated to a new site.

Discussion also was held on the possibility of establishing an acquisitions fund for the Smithsonian museums to purchase new items for their collections. Federal appropriations for fiscal 1981 for this purpose will amount to $800,000, but Yates advanced the fund idea as a possible means of giving the Smithsonian more flexibility in acquisitions programs. Yates cautioned, however, that "it may not be the time now to do this because of budget restraints" now prevailing on Capitol Hill.

A total of $120.3 million of the Smithsonian's $137.4 million federal request was allocated for salaries and expenses, the latter covering everything from utilities, education and exhibition programs to research and acquisitions.

Of the salaries and expenses total, science programs were allocated $41.9 million; facilities services, $32.3 million; history and art, $19.2 million; museum programs, $9.2 million; administration, $8.6 million; special programs, $6.6 million, and public service, $2.5 million.

Before Inflation

From the Smithsonian's Annual Report for 1847:

The Board of Regents have drawn for the treasury, for the current expenses of the Institution, the sum of	$7,584.07
The disbursements from this fund have been as follows:	
Expenses of Regents in attending meetings of the board	2,525.10
For materials and erection of specimens walls, and superintendence thereof	343.53
For compensation to architects for designs, etc.	1,025.00
For books purchased	479.49
For services of assistant secretary	200.00
For recording journal and documents, and sundry incidental expenses	193.25
For services of messenger	73.50
Postage	5.03
	$4,844.90
Leaving a balance in hand of	$2,739.17

Sports

Running: The Smithsonian one-and-a-half-mile Fun Runs continue on the Mall. In January, Eleanor Crow of Museum Programs and Bill Massa from Archives were the winners. OCS runners Karen Collins and George Meyer were victorious in the February events.

Fun runs will be held April 18, May 23 and June 20 at noon with the start and finish in front of A&I. A longer race (3-4 miles) will be scheduled if there is sufficient interest.

Basketball: The Smithsonian team finished the regular season with a 10-0 record. This is the third straight year in which the team was unbeaten and qualified for the city-wide tournament. Another SI team, the Running Wild Bunch, ended the season with a 6-4 record, tying for third place in the league.

Practice for the summer basketball league begins in July. If you are interested in playing for the Running Wild Bunch, contact Van Smith at ext. 4262.

Golf: The Smithsonian's Spring Snake-Killing Golf Tournament will be held in early May. If you are interested in entering, contact John Clarke, ext. 6107, or Ohlen Boyd, ext. 5665. The first 40 golfers who sign up will be able to participate.

—Louise H. Hull

Follow-Up

In last month's Page One article, "Treasures of '79 Tallied by SI Registrars," we reported that MHT acquired 1,200 items in 1979. We are informed that while there were 1,200 transactions during the calendar year, 84,202 items were officially acquisitioned. A transaction often includes more than one artifact.

SI automotive worker David Tucker fills a truck with gasohol as part of an energy conservation test program to reduce gasoline use. SI now buys gasohol at local stations, but there are plans to manufacture our own gasohol at Silver Hill in the near future.

Energy Savers Spotted Here

After just four months of activity, the SI energy conservation task force has come up with a wealth of information on areas where energy savings may be possible.

The following is an approximate breakdown of energy usage in SI Mall buildings:

Steam for heating, hot water and humidification	35%
Electricity for lighting	20%
Electricity for air distribution	18%
Electricity for cooling	14%
Electricity to run pumps	7%
Electricity for elevators and escalators	3%
Electricity to run equipment, tools and copiers	3%

Because lighting is the second biggest user of energy, the task force points out, all SI employees can help save by turning off lights when leaving offices and work areas. The task force members are hard at work figuring how the other categories of energy usage can be cut. Interestingly, during FY 1979, the Hirshhorn and the Renwick were the biggest users of energy per gross square foot. Air and Space and History and Technology were intermediate, while Natural History, Portrait Gallery, National Collection of Fine Arts, Arts and Industries, Freer and the Castle used the least.

Energy-saving modifications have already been adopted, and others are being studied to determine whether the savings achieved would be worth the cost of the changes required. The goal is to save energy without reducing the effectiveness of operations.

Modifications which pay for themselves in a year or less will be funded out of the Smithsonian's utility allotment. Beyond that, it is expected that the Institution's Restoration and Renovation Program will include modifications to heating, ventilation and air conditioning equipment which will yield substantial energy savings.

Pay stubs now carry an energy conservation message which will be changed from time to time. Notices of energy violations are being distributed throughout the Institution, and there have been few, if any, repeaters.

Van Pools

The Smithsonian's energy conservation task force is currently exploring the possibility of establishing a van pool service for its employees. Meanwhile, as a service to our readers, here is information on van and car pools.

If you live in Annapolis, Gaithersburg or Reston and commute to the Smithsonian every day, you may want to call one of the following van pools: Reston, Jan's Vans, 437-3656; Annapolis, Crabtown Commuter Association, 266-5725 (after 5 p.m.), or Gaithersburg, Energy Commuter's Association, SI ext. 6363.

(This notice does not imply endorsement by Torch or by the Smithsonian.)

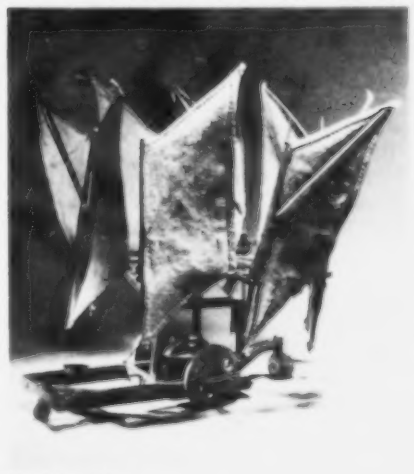
Odd, Funny, Big Objects In Our 'Attic'

By Linda St. Thomas

For years, museum visitors, reporters, television crews and visiting VIPs have asked to see our attic. They envision one room chock full of all those items we don't display—something like their grandparents' attic, but bigger.

We've never had one attic to show them . . . until now. Curators, designers, administrators and lots of other people in the Museum of History and Technology have worked together on an exhibition that should satisfy all those folks who have been hankering to see our "storage room."

"The Nation's Attic" is a display of 100 of the Museum's oddest, funniest, biggest, smallest and just plain offbeat items collected over the years by MHT curators and their predecessors in the old Patent Office Building, the U.S. National Museum and the Museum of Natural History.



Wind machine

To make curio hunters even happier, the exhibition fills an attic-like space—complete with rough exposed beams, old footlockers, antique trunks and wooden shipping crates for display cases.

The crates are authentic; in fact, they came right up from the Museum's own loading dock a few months ago, MHT designer Nadya Makovenyi said. She had the cases lined with plexiglass so that the artifacts will not be damaged by the rough wooden textures.

This isn't the first time many of these unusual artifacts have been on public display. Before the Castle was even completed in 1855, many were shown in the National Institute of the Patent Office Building, described in the *Popular Catalogue of the Extraordinary Curiosities* as articles of "extraordinary interest and of immense value." These included the Declaration of Independence, the coat worn by George Washington when he resigned his commission at Annapolis, Ben Franklin's cane, a fragment of Plymouth Rock, boxes of beetles, several mammals—including the common American muskrat—specimens of petrified wood and the hair of Gen. Simon Bolivar.

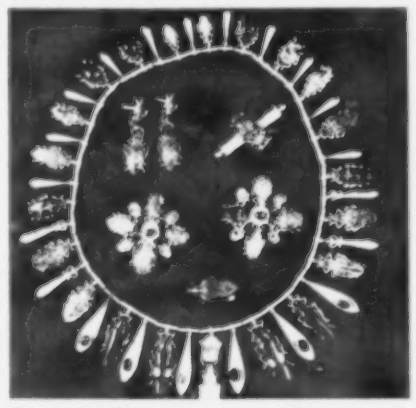
Silk purse from a sow's ear

"The best part of the Patent Office exhibits was the arrangement," said Ben Lawless, MHT's assistant director of exhibits who worked on "The Nation's Attic" for months. "They had no qualms about displaying the Declaration of Independence near a silk hat worn by a traveling monkey." That casual approach to exhibit design was pretty much what Smithsonian curators adopted years later when the artifacts were turned over to the new Institution.

Visitors probably will have favorite items, but a few are so outrageous that everybody's bound to love them: the silk purse made from a sow's ear, the wad of tobacco supposedly carried by Cmdr. Robert Peary when he arrived at the North Pole, a 235-foot American flag, paintings on cobwebs, the national collections of safety pins and pencils, a stone from the dungeon where Joan of Arc was imprisoned, trimmings from the hearse that carried Abraham Lincoln, an eyeball massager, a collection of miniature firearms and size 18 shoes for a 7-foot-tall Civil War soldier.

Eyeball massager

"This exhibit recalls the old image of the Smithsonian in a lighthearted way," MHT's new Deputy Director Douglas Evelyn said. "People expect us to have certain kinds of things, and so we've just put them all together for this show."



Insect jewelry

Many of the artifacts are more than "oddities" stored in SI's so-called attic areas. For example, flag fragments from the flag snippet collection are a valuable research source for identifying and dating other flags in the collections.

"The Nation's Attic" was truly a group effort, with curators Robert Vogel and Carl Scheele and rare-book keeper Silvio Bedini collaborating with Lawless and Makovenyi. Staffers in just about every department at the Museum contributed favorite artifacts for the exhibition.

"The Nation's Attic" is located on the third floor of MHT near the escalator. It opens, not by coincidence, on April Fool's Day and continues through Sept. 15. After that, we'll have to revive our speech for visitors: "Actually, the Smithsonian doesn't have just *one* attic . . . ."

'Telephones' *(Continued from Page 1)*

is the local dial tone and 0 is the SI operator.

The telephone operators will continue to work in their MHT quarters, but they will use computer desk-top consoles rather than the old-fashioned switchboard with its thousands of wires. With the time-consuming task of plugging and unplugging cords eliminated, the operators will be free to help the thousands of people who call the Smithsonian and the SI staffers who need assistance with overseas or other calls.

Meanwhile, people sitting at their desks will have use of some telephone features they didn't have before.

You will be able to transfer a call from your phone to another Smithsonian phone without asking the operator for assistance. To make the transfer, simply depress the buttons on the receiver cradle, dial the number you want and hang up the phone. The caller will automatically be switched to the new party. The official name of this simple process is Individual Station Transfer.

Conference calls will also be possible for staffers on Smithsonian lines. With the current system, such a call can be arranged only with the assistance of the operator. After the changeover, you can bring a third person into your two-party call by pushing the button, dialing the next person and pushing the button a second time. Then you'll be talking to the two people simultaneously.

If you prefer, you can just push the button and talk to your second party privately while the first person automatically stays on hold. When you're finished, push the button again and you'll be back with the original caller.

Another advantage for growing SI organizations is that a rotary (consecutively numbered lines that ring in sequence) will no longer need consecutive numbers. Any two lines in the same office can be put on a rotary. For example, if 357-2627 is busy, it may ring next on 357-2816.

The new touch-tone phones will come in handy especially because it will be necessary to dial all seven digits even when calling someone inside the Smithsonian. In other words, if your number is 357-3030 and you need to call your colleague in the next building, you must dial the complete number, 357-2700, for example. All Smithsonian exchanges (357, 745 and 479) will be on the same system, however, so there's no need to dial 9 before placing an in-house call. (You'll still have to dial 9 to get an outside line, though.)

To help cope with these changes, all staffers are scheduled to receive their new Smithsonian directories (with new numbers and instructions for Centrex II) several weeks prior to the changeover weekend.

What happens to the outside caller who dials a 381 number after June 2? In certain cases, he or she will get the familiar recording: "I'm sorry, but 381-5911 is not a working number. Please note: The new number is . . . ."

However, only those phone numbers listed in the C&P directories, yellow and white pages, will be hooked up to such recordings. Callers trying to reach other offices or facilities will be automatically switched to the SI operators, who will give them your new phone number.

The recordings will be in effect for one year, and there will be extra operators on duty for several months to help transfer other callers.

The transition period will be easier if, in advance of June 2, you let business associates and the public know about it. This will help prevent delays as the SI operators try to handle all the incoming calls on the old numbers. If your organization puts out publications (other than correspondence, memos, etc.) with your phone number, call Moreci's office at ext. 6363 to find out your new phone number so your materials can be updated.

If an over-anxious caller uses your new number in the few weeks before the switch, he or she will get another recording that says, "I'm sorry, 357-2627 is not a working number. Please call 628-4422 for assistance."

Frederick K. Stevens

Frederick K. Stevens, 44, a mechanical engineer in the High Energy Astrophysics Division of the Center for Astrophysics, died on Jan. 20.

Mr. Stevens joined CFA in 1974 and contributed to both the conceptual and detailed designs of many instruments, test fixtures and mechanisms. He was responsible for the mechanical design of the sounding rocket experiment, which verified the Einstein (HEAO-2) Satellite's High Resolution Imager design and which predicted the X-ray background rates prior to the launch of the Einstein satellite.

Flemish Children's Theater of Ghent will be featured during "Belgium Today."

Chants Emerge From Wax

By Kathryn Lindeman

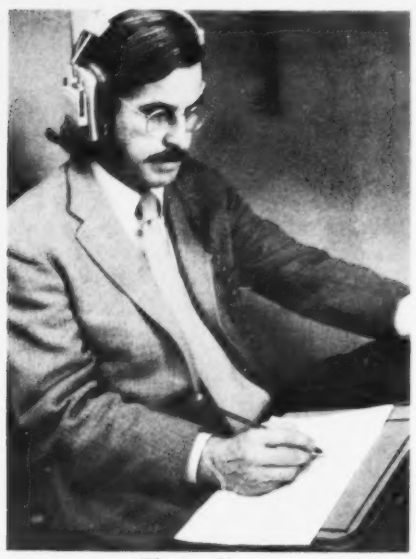
At first there was only a scratching sound. Then, filling a recording studio as it must have filled an Indian lodge years ago, came the sound of Raincloud of the Chippewa tribe chanting a dream song. Rising and falling rhythmically, overpowering the defects of the recording made more than a half-century ago, the words of the sacred song came to life once more.

To capture such songs, Frances Densmore, a musician and teacher, had tramped through the wilds of Northern Minnesota in the early 1900s, recording on wax cylinders, the most effective device then available to researchers studying the rapidly vanishing culture of the Native American tribes.

As a child in the 1870s, Densmore had listened to the enchanting songs and sounds from a Sioux Indian camp across the Mississippi River from her home in Red Wing, Minn. Like others interested in preserving tribal customs, she later became determined to record songs and chants of the oldest Indian singers, whose tribes had roamed the plains and prairies before wars with the white explorers and settlers doomed them to humiliation or extinction.

Densmore eventually recorded and described in special publications more than 3,000 songs of 30 tribes, from the Minnesota Chippewa in 1907 to the Florida Seminole in 1954.

Her recordings and those by other researchers are now being transferred to



Richard Hofmeister

Thomas Vennum

modern high-quality magnetic tape in a three-year project under way at the Library of Congress' American Folklife Center. Thomas Vennum, an ethnomusicologist with the Smithsonian's Folklife Program, is director of the project, which involves more than 3,500 wax cylinder recordings of American Indian music and legends recorded from 1889 to 1930.

"Along with the major concern of preservation," Vennum says, "the project is intended to provide Native Americans with information about their past."

To record the Indian traditions, Densmore purchased an Edison Home Phonograph in 1907 with a $150 grant from the Bureau of American Ethnology, established by the Smithsonian Institution in 1879 specifically to document disappearing aspects of Indian culture.

The wax cylinders she used came on the market in 1889. In the field, a researcher toted a small horn for recording, a large horn for playback, the phonograph itself and the boxes of cylinders. Even though the equipment was heavy and bulky, there was less paraphernalia involved in recording on wax than on discs.

Wax cylinders, made in 4-inch and 6-inch lengths, could accommodate an average of 4 minutes worth of music. A cylinder's shape resembled nothing so much as a modern frozen orange juice container with both ends removed.

In a Library of Congress recording studio, Erika Brady, a doctoral candidate in folklore, tapes the music from the cylinders, simultaneously adding on a second track an explanation of her procedure step by step: "This cylinder is being played at 67 feet per minute, which is 120 revolutions per minute . . . The stylus size is 10 mil with a hemispheric tip . . . Having a little tracking problem here . . . "

"This commentary is made so that anyone listening to the tape can have an explicit idea of how it was recorded," Brady says. "In recording onto preservation tapes, I filter out some of the scratchy overtone, much of it caused by cylinder deterioration."

The cylinders—made of a soap-like substance containing paraffin, stearic acid and softeners such as olive or castor oil—are very brittle and fragile because of age. Although they are wrapped in cotton and stored in cardboard tubes, many have been scratched or broken, mice have gnawed the edges or mold has formed. All of this points to the urgency of getting the songs onto tape: The cylinders themselves can't be preserved indefinitely.

Vennum and Folklife Center staff members Maria LaVigna and Ronald Walcott sort through the cylinders and gather information about each one. The challenge of providing accurate and complete documentation is as important as getting a good recording, Vennum says. "We feel a big responsibility to include as much about the songs as possible—the date, singer, song text, English translation, recorder's name and anything else we know about the contents."

In one case, project researchers rediscovered certain sacred songs which were thought by their tribe to be lost forever. By circulating among scholars a master tape of unidentified music, Vennum hopes to recover additional song texts, identify song genres and generate more documentation from areas where field workers are studying particular tribes.

Have A Look

Vichai Malikul, a scientific illustrator at MNH, will exhibit color photographs of Thai traditional costumes from ancient to modern times in the MNH Staff Gallery through May 16.

Beginning in mid-May, MNH mammal specialist Frank Greenwell will show his natural history photographs.

The gallery is located on the first floor, just outside the staff cafeteria. For more information about exhibitions, call Mike Carpenter, ext. 5753.

Fireworks For 'Belgium Today'

Fireworks and royalty will herald the opening of "Belgium Today," a celebration of Belgian culture marking the 150th anniversary of the nation's independence.

The celebration will open Sunday, April 20, at 9 p.m. on the Mall with the first musically choreographed fireworks display ever presented in Washington. The triumphal Belgian music accompanying the fireworks will be broadcast by WGMS-AM (570) and WGMS-FM (103.5). Those planning to attend should bring their own radios.

"Belgium Today," continuing into early June, is made possible by the National Endowment for the Humanities and the National Endowment for the Arts, with the cooperation of the government of Belgium. The events are sponsored by the Smithsonian Resident Associate Program, the Belgian American Educational Foundation and the World Affairs Council of Northern California.

King Baudouin and Queen Fabiola will be in the capital for the opening events, and King Baudouin will present the keynote address April 21.

Washington Mayor Marion Barry has proclaimed the first week of the festival "Belgium Today" Week.

The Resident Associate Program, as well as the Renwick Gallery and the Hirshhorn Museum and Sculpture Garden, have planned many activities to mark "Belgium Today." Highlights from the Resident Associates' schedule include:

- A seven-week festival of Belgian films from the '20s to the '70s, organized by the Museum of Modern Art, New York. The feature movies, avant-garde classics and animated shorts are subtitled in English.
- A brunch concert by the Belgian Brass Quintet of Theo Mertens, featuring classical and contemporary works.
- Performances by two troupes of young people—the First All-Children's Theatre of New York presenting the play, "Grown-ups," and the Flemish Children's Theatre of Ghent, performing the musical, "Spring Out of Your Chest."
- An illustrated lecture examining the civic architecture of Belgium, with emphasis on Brussels, Ghent, Bruges and Louvain, by Belgian architect Yves Lepere, professor in the Architectural Department at the University of Pennsylvania.
- A five-week illustrated course exploring the history and contemporary culture of Belgium, with guest experts, including Prince Antoine de Ligne lecturing on the castles of Belgium.
- A lecture on the history of Belgian lace by Mary Lou Kueker, chairman of the Chesapeake Regional Lace Guild, with a demonstration of lacemaking techniques by fiber artist Jeanne Romanowski.
- An eight-week studio class on the ancient Belgian art of tapestry weaving with weaver Ellen Baum.
- A film for young people, "Dog of Flanders," starring David Ladd, Donald Crisp and Theodore Bikel, adapted from the 1872 children's novel by Ouida.
- A children's class on the history and craft of marionettes in which students ages 7-12 construct stringed marionettes and learn how to manipulate them.
- A workshop on giants—Belgian and others—for youngsters ages 4-9.
- A lecture on the history of Belgian cuisine by Elisabeth Boulpaep, a native of Belgium, including sampling of selected delicacies.
- Tours of "Seven Belgian Artists: Selections from the Hirshhorn Museum and Sculpture Garden"; the Phillips Collection exhibition, "Leon Spilliaert: Symbol and Expression in 20th-Century Belgian Art"; the Corcoran Gallery of Art exhibition, "Georges Vantongerloo"; the exhibit, "Founding of the Belgian Nation," at the Library of Congress; a Belgian artists' group show at Meridian House International and the Jan Yoors tapestry exhibition at the National Academy of Sciences.

For details, consult the Associates' April newsletter, available in RAP offices, A&I-1271.

Performances

Marionettes will perform in the Renwick Gallery's Grand Salon June 1-14 at noon and 1:30 p.m. as part of "Belgium Today." Belgian puppeteers will present four plays:

- "The Four Sons Aymon"—The sons of the Duke of Amon, insurgents against Charlemagne, are besieged in

A sinister "performer"

their castle but escape through an underground passage.
- "The Three Knights"—In spite of their help in defeating the enemies of King Lisvart, Perion and his two sons are still imprisoned.
- "Ogier the Danish"—Ogier, son of Prince Geoffrey of Denmark, helps save Charlemagne's life and is justly rewarded.
- "The Nativity"—A retelling of the New Testament narrative.

Performances are free, but tickets, available at the Renwick information desk, are required.

Peter De Anna

Peter De Anna, veteran Smithsonian visual information specialist, died of cancer on Feb. 14 at the age of 59. He had worked at the Smithsonian for 22 years, retiring in 1979 on account of his illness.

Mr. De Anna was known for some dozen murals he painted at the National Air and Space Museum, where he worked most recently. He came to NASM from across the Mall where his murals can be seen in the Hall of Native People of the Americas at the Museum of Natural History and in the children's section of the Numismatics Hall at the Museum of History and Technology.

Mr. De Anna was also a respected realist painter whose exhibition at Washington's Studio Gallery in 1979 drew praise from local art critics. A self-portrait in the show was purchased by the Hirshhorn Museum.

Survivors include his wife, Grace, and four sons, two sisters and a brother.

Belgium Events In SI Museums

"Belgium Today" will be observed around the Smithsonian with these exhibitions:

- "Seven Belgian Artists: Selections from the Hirshhorn Museum and Sculpture Garden," April 10 through May 26. The exhibition will include 16 works by Magritte, Alechinsky, Pos Bury and others.
- "Alexandra Exter: Marionettes and Theater Designs" at the Hirshhorn, April 17 through July 6. Russian-born Exter began work on theater projects in Moscow in 1914 and pursued her career in Paris where she created the marionettes in 1926 for an unrealized film. "Aelita," a 1924 science fiction film with Exter's costume designs, will be shown at the Museum Thursday and Friday, April 17 and 18.
- "Traditional Marionettes in French Belgium Today" at the Renwick, April 23 through July 27. Fifty costumed marionettes, each almost half the size of a person, will be displayed in an exhibition organized by the Musée de la Vie Wallonne in Liege with the cooperation of the Belgian government.
- "Belgian Lace" at the Renwick, May 16 through Nov. 11. Made in a variety of styles and using several techniques, the lace on display will include skirts, parasols, bonnets, shawls and collars from a private collection. Lacemaking tools from the Museum of History and Technology will complement the exhibition.

READEX FICHE

Letters to SI: 'Dear Castle'

By Johnnie Douthis

When the Insect Zoo announced the need for more insects and requested donations, a youngster in Chicago wrote in to offer a bug and asked for a quick reply because his sister promised to "stomp" on it if he didn't get rid of it fast.

The Smithsonian gets letters, lots and lots of letters. The letters come addressed "Museum on the Mall," "Castle Building" or "Smithsonian Institute." Depending on the topic, they are answered by curators, museum specialists, NASM library staff, the Visitor Information Center or Secretary Ripley.

The Visitor Information Center alone receivs 2,000 to 2,500 letters monthly on subjects that relate to all areas of the Smithsonian, as well as those that don't—the best hotels and restaurants in the area.

NASM's Library receives more than 500 letters a month from children and teachers, aviation buffs and researchers requesting free brochures and leaflets on aircraft, personalities, the planets, space missions, Apollo, Voyager and other subjects.

The Secretary's Office receives about 50 letters daily on such topics as wildlife and conservation. Other letters ask about the Smithsonian's financial involvement in book publishing projects or use of Smithsonian facilities. Even appeals to save Venice or the Taj Mahal are addressed to the Institution.

Letters of mistaken identity come in for the Secretary. Some people think he is the creator of the Ripley's "Believe it or Not" column and submit items for publication. Autograph collectors ask for the Secretary's signature as well as autographed photographs.

Letters received by the Visitor Information Center often deal with current news or popular movies. When "Jaws" was released, the Center received a flood of letters asking for information on sharks. "Star Wars" prompted requests for material on the operation and construction of equipment used in the film. UFOs are also a favorite topic of queries. So are the Bermuda Triangle, the "curse" of the Hope Diamond and the First Ladies Hall.

Letters of praise are common. One to the Secretary from William C. Strasser, president of Montgomery College in Rockville, Md., said, "The Smithsonian, through all of its enterprises, has made it possible for the people of the area to discover in themselves a fuller . . . cultural, intellectual and emotional life."

Sometimes, compliments are directed to specific Smithsonian offices, such as the National Associates for the "Smithsonian on the Road" program and for the Selected Studies Program which brings Associates to Washington for in-depth studies of various Smithsonian activities. The Smithsonian's help to handicapped visitors or assistance in locating lost personal objects also prompts thank-you letters.

Then there are complaints. Most of them are related to computer errors such as delays in receipt of items ordered from the shops, but some express displeasure with objects in SI exhibitions.

The historical significance of the chairs from "All in the Family" was questioned by some. Others have coplained about the lack of sufficient facilities for the handicapped, and, for a time, there were letters expressing dismay about the quality and price of food in the cafeterias. Occasionally, visitors want to know why their cars were towed, allegedly without proper warning.

Most letters from children are written during the school term—many seeking help with classroom projects. One youngster from Australia wrote to NASM asking for as much material as possible, because "I will never be able to come there."

Numerous "how to" inquiries request information often available in local libraries or other community facilities. One letter asked how to build and design tools. Another asked how to protect a century-old bell from rust. And young people in search of a profession ask how to start careers in anthropology, archaeology or biology.

Richard Holmeister

Mail room zip is provided by (from left) mail clerks Thomas Gorham, George Gray, Joseph Goffney, Robert Myers and Assistant Supervisor Zeff Richardson.

Natural History Scientists Honored

Drs. Karl V. Krombein and Paul D. Hurd Jr., entomologists at the Museum of Natural History, and MNH oceanographer Dr. Daniel J. Stanley have been honored by the American Association for the Advancement of Science for their research.

The AAAS elected all three as fellows—"members whose efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished."

Krombein specializes in the study of solitary wasps and was cited for "major contributions to the classification and ecology of the North American wasps—and for pioneering work in the processing of data on insect classification and distribution."

Krombein is the author of *Trap-Nesting Wasps and Bees: Life Histories, Nests and Associates* (Smithsonian Institution Press, 1967), a study considered a classic of biological observation of insect ecology. He also chaired a committee of Smithsonian and U.S. Department of Agriculture scientists that prepared the *Catalog of Hymenoptera in America North of Mexico*, a monumental work that catalogs all the basic systematic and biological information on the continent's bees, wasps and ants. The information is also stored on computer. The three-volume work was published in 1979, also by the Smithsonian Press.

Hurd specializes in studies of both solitary and social bees. He was cited for "major contributions to the classification of the North American bees and pioneering work in the processing of data on insect classification and distribution." His systematic studies focus on bees that pollinate plants useful to mankind—such as squashes and sunflowers. His pioneering experiments are aimed at enhancing this capability. He is currently working on a major study of the Halictidae bees of the Western Hemisphere.

Stanley was honored "for distinguished contributions in geological oceanography." He is the author of four major treatises on the marine geology of the Mediterranean and northern Atlantic and deep-water sedimentology, including the volume, *The Mediterranean Sea—A Natural Sedimentation Laboratory*, a basic reference on this region.—*Thomas Harney*

Commendation for Smithsonian Guard

NINETY-SIXTH CONGRESS

COMMITTEE ON HOUSE ADMINISTRATION

Congress of the United States
House of Representatives
COMMITTEE ON HOUSE ADMINISTRATION
SUBCOMMITTEE ON LIBRARIES AND MEMORIALS
2418 RAYBURN HOUSE OFFICE BUILDING
Washington, D.C. 20515

November 26, 1979

Dr. S. Dillon Ripley
The Secretary
The Smithsonian Institution
SI 207 The Castle
Washington, D.C. 20560

Dear Mr. Secretary:

I thought you would want to know, although belatedly, of the outstanding service performed by an officer of the Smithsonian Protective Service this summer.

I am told that Mr. William Sanders of the Smithsonian force helped save the life of a man outside the National Portrait Gallery in late July by administering mouth-to-mouth resuscitation and first aid while the D.C. rescue squad was being summoned.

Mr. Sanders' clear thinking and quick, well-trained response are commendable. It is good to know that such an individual is associated with the Smithsonian Protective Service.

Cordially,

LUCIEN N. NEDZI
Chairman, Subcommittee on
Libraries and Memorials

LNN:cas

Richard Holmeister

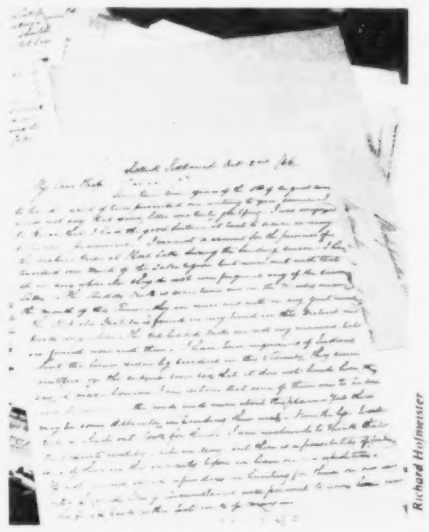
Hudson Bay Papers Found

A batch of more than 600 letters written in the 1860s to Spencer Baird, then the Smithsonian's assistant secretary, by some 30 agents and officials of the Hudson's Bay Co. has been discovered amidst the collections at the Museum of Natural History.

The papers, stored in a cardboard box, were turned up by MNH's Frank Greenwell, who realized their historical importance and notified William Deiss, deputy archivist at the Smithsonian Archives.

Deiss, who has studied and written about the network of collectors that Baird assembled, said that the letters are key documents relating to one of Baird's early collecting initiatives: the dispatch of naturalist Robert Kennicott to the Canadian Arctic in 1859.

As he made his way northward on that collecting trip, Kennicott met Hudson's



Richard Holmeister

A correspondence comes to light.

Bay agents, who had been contacted in advance by Baird, and talked them into becoming Smithsonian collectors. As a result, in the decade following his journey, specimens poured into the Smithsonian from Hudson's Bay outposts in the Canadian wilderness.

"We have the letters that Baird wrote to those men," Deiss said, "giving encouragement, advice and whatever material assistance he could offer. But we had no idea that the letters they wrote back to him reporting on their activities still existed. They were lost for nearly 50 years.

"We're very happy to rediscover them. They fill an important gap in the Baird papers and in the history of early collecting work at the Smithsonian."

—*Thomas Harney*

Observatory Nights

A new series of "Monthly Observatory Nights for the Public" has proved to be a smash success at the Center for Astrophysics in Cambridge.

The free programs, featuring a lecture by a Center staff member, a film and a chance to look through telescopes, are given on the third Thursday of each month. The programs are coordinated by Arlene Walsh of the Publications Department.

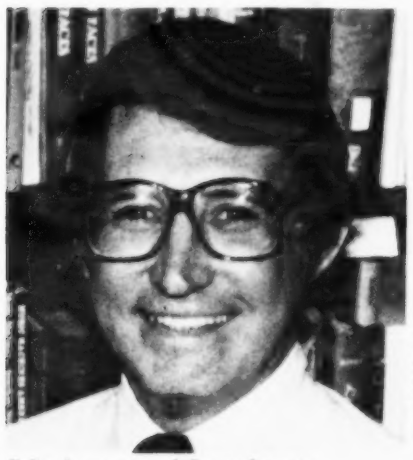
Since the second night of the program, every lecture has drawn capacity crowds. Indeed, in November, when the lecture night coincided with the announcement that astronomers had figured out a "new age for the universe," nearly 600 people turned up, forcing a quick scheduling of a repeat performance the same night.

The Center is also sponsoring two special "Children's Nights" each year.

In Arizona, a similar program of free lectures is given in the community of Green Valley near the Mt. Hopkins Observatory. Observatory staff members, plus visiting astronomers from Cambridge, provide a series of weekly talks during January and February, the traditional "sun season" for southern Arizona. Dan Brocious coordinates the programs there.

SMITHSONIAN TORCH
April 1980

Published for Smithsonian Institution personnel by the Office of Public Affairs: *Alvin Rosenfeld*, Director; *Susan Bliss*, Editor; *Kathryn Lindeman*, Editorial Assistant.



Richard Hofmeister

Felix Lowe named Press director

Comings and Goings

Felix C. Lowe, deputy director of the Smithsonian Press, succeeded **Edward F. (Ted) Rivinus** as Press director in early March. Lowe, a native of Johnson City, Tenn., came to SI in 1976 and was responsible for revitalizing the Press' marketing techniques. He worked closely with Rivinus in revamping the editorial, design and production of Press publications.

Rivinus, who ran the Press since 1974, will remain on staff in a part-time position to assist in editorial and administrative matters.

After almost eight years as the Smithsonian Women's Program Manager with the Office of Equal Opportunity, **LaVerne M. Love** has resigned. She was the first person to hold this position and for seven years

Rolfe Baggett

LaVerne Love

served as the highest ranking black woman at the Institution. Love served as executive officer of the SI Women's Council and wrote the organization's first bylaws. In 1976-77, she chaired a Civil Service Commission task force on minority women which helped to initiate a system of compiling statistics on the sex of federal employees by race. Love has returned to her hometown of Cleveland where she will operate her own business.

Nancy Nooter, assistant academic coordinator and university lecturer in the Department of Higher Education at MAA, has begun a three-year leave of absence. She will accompany her husband, Robert, to Tanzania where he will serve as head of the World Bank office.

Donald W. Dormstetter, formerly an electrical engineer in the Office of Facilities Planning and Engineering Services, joined the Office of Plant Services as the Smithsonian energy conservation engineer last month. Dormstetter, whose degree is in engineering, has eight years of experience with SI energy consumption operations. He can be reached on ext. 6733.

Ann S. Campbell, director of the Management Analysis Office for a number of years, has retired after 33 years at the Smithsonian. **William F. Clouser Jr.** has been named acting director. A farewell reception was given for Campbell in mid-March by Assistant Secretary for Administration John Jameson and the MAO staff.

Staff changes at CFA include: **Alan Lightman,** formerly assistant professor at Harvard University, has joined CFA as an astrophysicist; departing were **Helen Beattie** and **William Barstis** who retired. Beattie was administrative secretary in the Optical and Infrared Astronomy Division, and Barstis worked in the Center's Computations Department as a digital systems computer operator.

Newsmakers

By Johnnie Douthis

Joe Shannon, Hirshhorn exhibit chief and artist, will have a one-man show of his paintings at the Tibor de Nagy Gallery in New York opening in May. This, after recent local exposure of his work at the Middendorf-Lane Gallery and at the Corcoran's exhibition of nine local artists.

Amina Dickerson, program director at MAA, and **Zora Martin-Felton,** manager of the Education Department at ANM, were recently honored by Howard University's Institute for Urban Affairs and Research. Dickerson received a Special Service Award in recognition of her outstanding achievements in the arts. Felton received a Merit Award Certificate for contributions to the life and culture of the black community. The awards were presented at the annual Black Women's Symposium sponsored by the Institute.

Warren Robbins, director of MAA, lectured in New York on "Traditional African Art in a Universal Context" at a Nigerian-American conference sponsored by the newly established Nigerian-American Friendship Society.

Richard Virgo, chief of exhibits management at MHT, has been invited to serve on the board of directors for the Graphic Arts Program at the Department of Agriculture Graduate School.

Christian Rohlfing, curator of collections at Cooper-Hewitt, was a juror for the Ninth Annual Product Design Awards Program sponsored by the Resource Council, an information center in New York for designers and manufacturers.

John Harris, editor at the Smithsonian Institution Press, has had three articles accepted for publication this spring. His "Life Experiences: The Fleem Report" will appear in Harper's, "Major Minor Masters of the Italian Renaissance" will appear in the Atlantic Monthly and "How To Do It" will be published by Esquire.

Kevin Sullivan, director of CBCES, has been appointed to a steering committee which will direct "Development of a Use Ethic for the Chesapeake Bay," a project proposed by the Citizens Program for the Chesapeake Bay and funded by the Maryland and Virginia committees for the humanities.

Robert B. Burke, director of Protection Services; **Paul Perrot,** assistant secretary for museum programs, and **Edward Sniechoski,** chief of safety and fire protection, made presentations at the Art Security Institute sponsored by the University of Minnesota in Minneapolis.

Frer curator **Esin Atil** and **Ann Gossett,** senior program officer with SITES, traveled to Egypt to complete negotiations with officials of the Museum of Islamic Art and the National Library for a SITES exhibition, "Renaissance of Islam: The Art of the Mamluks." The show will begin its road tour in the United States in 1981. Atil and Gossett then traveled to Paris for discussions at the Louvre, which also will lend objects for the exhibit.

Dennis Whigham, CBCES ecologist, has been appointed an adjunct associate professor in the School of Forest Resources and Conservation at the University of Florida.

Emily Dyer, registrar for SITES, recently participated in a workshop on traveling exhibitions at the Mid-American Arts Alliance held in Lincoln, Neb.

Ann Yonemura of the Freer traveled to Alabama where she lectured on Japanese lacquer at the Birmingham Museum of Art and the Montgomery Museum of Art.

Jane Driesbach, exhibition coordinator with SITES, is currently working with the World Print Council in San Francisco to organize the SITES show "World Print III."

Monroe Fabian, associate curator of paintings and sculpture at NPG, spoke on problems in the attribution of 18th- and 19th-century American paints during the Smithsonian-National Bureau of Standards seminar series "Application of the Materials and Measurement Sciences to Archaeology and Museum Conservation."

Cynthia Jaffee McCabe, curator for exhibitions at HMSG, was the sole juror for the LaGrange National V, sponsored by the Chattahochee Valley Art Association and LaGrange College in LaGrange, Ga. She also delivered a lecture at the college on "The Hirshhorn Museum: A Personal View."

Donald L. Horowitz, research associate with the Research Institute on Immigration and Ethnic Studies, delivered the McDonald-Currie Memorial Lectures at McGill University in Montreal. He spoke on "Ethnic Conflict and Accommodation in Comparative Perspective."

Martin Williams, director of DPA's jazz program, spoke to a group of foreign students at Georgetown University on "Performing Arts in America."

Marjorie Share, education coordinator with SITES, spoke on "Traveling Exhibitions: Interpretive Programming," to participants in a joint seminar on arts management sponsored by the Long Beach Museum of Art and the University of California.

Especially for Families

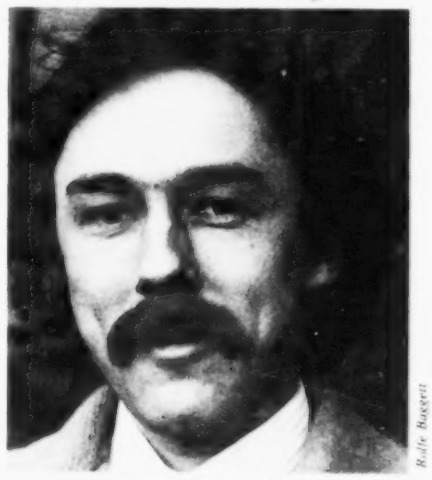
The Chesapeake Bay Center for Environmental Studies will offer "An Afternoon Behind the Scenes" for families, young people and adults on Saturday, April 26 (April 27 if it rains). Visitors to the Rhode River site off Chesapeake Bay will have a chance to explore outdoor research sites, indoor laboratories and waterside shoreline ecosystems. For additional information, call 261-4190.

The National Collection of Fine Arts will celebrate Children's Day with a turn-of-the-century theme on Saturday, April 19, from noon to 5 p.m. There will be quilting, silhouette design, nosegay folding, even chances to act out a favorite painting. The Sea Chanters of the U.S. Navy will present American music of the early 1900s; docents and staff will be in period dress.

MAJOR ADDITIONS . . . *This untitled oil on canvas (1961) by Franz Kline is one of 26 works newly acquired by the National Collection of Fine Arts from the collection of Vincent Melzac of Alexandria, Va. Sixteen of these 20th-century paintings by major contemporary artists were donated by the collector and 10—including the untitled oil by Kline—were purchased by NCFA with trust funds from the Institution's Collections Acquisition Program. Works by Clyfford Still, Morris Louis, Willem de Kooning, Milton Resnick, Kenneth Noland and Gene Davis are also included.*

Val E. Lewton, assistant chief of exhibition and design at NCFA, is one of two artists included in the exhibition, "Watercolors: America and Europe," at the Studio Gallery in Washington.

Mark Wolfe III, construction engineer with OFPES, is now a registered professional engineer, after passing the examination of the Maryland State Board of Registration. Wolfe joined OFPES in 1978 and has suervised construction projects in a number of Smithsonian buildings.



Rolfe Baggett

Mark Wolfe

NASM Research Director **Farouk El-Baz** traveled to India and Egypt as leader of a research team sponsored by the SI Foreign Currency Foundation. El-Baz studied how space photographs may be used to monitor the environmental impact of climate changes. He has set up a research program at NASM to continue these investigations.

Alice Malone and **Betty Sharpe,** of MHT's Division of Education, attended the American Association of Museums' seminar on lifelong learning, held in New Orleans.

Kerry Joels, chief of NASM's Education Services Division, presented a paper on "Science and Pseudo-Science in Aerospace Education" at the Junior Sciences and Humanities Symposium held in Detroit.

Lloyd Herman, director of the Renwick Gallery, recently visited Caracas to select objects for a 1982 Renwick exhibition of Venezuelan textiles.

Richard Hallion, curator in NASM's Space Science and Exploration Department, won first prize in the Robert H. Goddard Historical Essay Competition for his work "The Antecedents of the Space Shuttle." This is the third consecutive year in which the award has been given to a NASM employee.

"Grave Sculptures of the Dakakari," a study by **Allen Bassing,** assistant curator of education at the Renwick, was published in *Visual Arts, Plastic and Graphic* as part of the World Anthropology Series of the Ninth International Congress of Anthropological and Ethnological Sciences in The Hague, Netherlands.

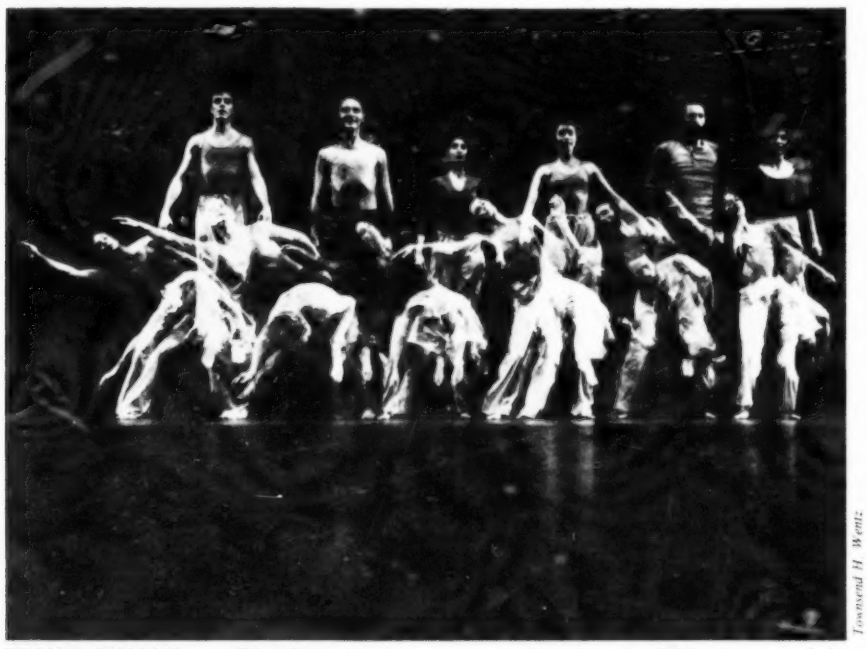
Career Service Emblems were presented to six NASM employees: **Frank Nelms** (30 years), **James Dean** (25 years), **James Jones** and **Kenneth Smith** (20 years), **M. Antoinette Smith** (15 years) and **Claudia Oakes** (10 years).

Awards for outstanding performance were recently given to the following NASM employees: **John Cusack, Louise Hull** and **Wendy Stephens** received quality step increases; sustained superior performance awards went to **Dorothy Cochran, William Good, Karl Heinzel** and **Harvey Napier.**

Eric Gaardsmoe of OPlantS was awarded a special NASM certificate of merit for his skill in hanging the Museum's artifacts. This is the first time the award has been presented to an employee of another bureau. Gaardsmoe has been a rigger at the Smithsonian for four years, working at most of the museums. At NASM he has hung the Starship "Enterprise," the Wright Military Flyer and the Mariner 10 and Ranger spacecraft, among others.

Bernice Reagon, director of DPA's Program in Black American Culture, gave a lecture on black folklore at Ohio State University during the University's celebration of Black History Month.

Alexander Dalgarno of CFA will receive an honorary Doctor of Pure Science degree from the Queen's University, Belfast, Northern Ireland, in July for "distinction in theoretical atomic physics and its applications."



Townsend H. Wentz

SERIES FINALE . . . *The Zero Moving Dance Company will conclude DPA's premiere dance series, "The American Dance Experience," with a performance at George Washington University's Marvin Center at 8 p.m. on Monday, April 28. As part of the series, the dance company will also present a master class for area dance students and a lecture-dance demonstration. For further information, call ext. 6525.*

Fossils Show Off In New Hall

The revolutionary conquest of land by plants and animals is dramatically explained and illustrated in a permanent exhibit opening to the public at the Museum of Natural History on April 17. The exhibit is one of the highlights of a sweeping reorganization and redesign of the Museum's older fossil halls.

More than 350 fossils from the Museum's paleontological collections are displayed to demonstrate the progressive developments in animals and plants which gradually enabled them to perfect the ability to live on land. Among the featured attractions:

● Eryops—the reconstructed remains of one of the first large fossil amphibians. This 6-foot-long, massively toothed creature, resembling a short tailed alligator, lived 270 million years ago in swamps in what is now Texas.

● Callixylon—a 15-foot-high, free-standing trunk segment of one of the world's early trees. It was mistaken for a petrified giant snake when it was first dug up in Oklahoma at the turn of the century.

● *"Populus", potomancensis*—a fossil leaf from one of the world's early flowering plants, collected from a fossil formation that literally runs right under the Mall.

in the evolution of life, as seen in the fossil record. It is a unique approach, something no other major U.S. natural history museum has done before.

"The dinosaurs will still be the main attraction. But we believe people are going to find the other 14 aspects of the fossil record highly exciting, particularly because we have dropped our old approach of isolating each fossil group."

The Museum's first modern "integrated" fossil hall was "Ice Age Mammals and the Emergence of Man," which opened in 1975.

The planning for "The Conquest of Land" was begun in 1976 by a scientific committee composed of MacIntyre and Drs. Daniel Appleman, Robert Emry, Leo Hickey, Nicholas Hotton, Kenneth Towe and Thomas Waller, in coordination with Gene Behlen, MNH's Office of Exhibits chief.

"To accomplish the elaborate and complex exhibits in this hall has required the work of the entire MNH exhibit staff," Behlen said. "The designer most responsible for the first two highlights is Beth Miles.

"Phase two of four sequential or overlapping projects will be the dramatic new dinosaur hall, opening next winter. It will

Chip Clark

Leroy Glenn Jr., a craftsman in MNH's Vertebrate Preparation Laboratory, puts the finishing touches on Eryops, an early amphibian, for the "Conquest of Land" exhibition.

"This is the first phase in the reorganization of our four old paleontological halls into one large unified hall, to be called "Fossils: The History of Life," Dr. Ian MacIntyre said. He is an MNH paleobiologist and chairman of the Museum scientific committee overseeing the reorganization.

"When completed in 1982," MacIntyre said, "the reorganization effort will integrate all of the fossil groups—both plants and animals—into a series of 15 highlights

be designed by Richard Molinaroli and Gail Singer, and capped off by two balcony exhibits made by Riddick Vann.

"The last-minute mad rush to the opening date lies heavily on the staff of the Office's Production and Fabrication Laboratory, headed by David Christie and Carl Alexander."

George Stanley, a research associate, and Elaine Peret have helped research and locate specimens.

SI in the Media

The Big Apple loved the Smithsonian Chamber Players if the press coverage of the group's New York debut is any indication. The New York Post, the Daily News and the Times praised the concert and all three dailies took special note of the antique instruments used for the performance.

Washington Star writer Boris Weintraub did a profile of SITES and quoted Acting Director Eileen Rose: "We're not here for the big institutions that can put on shows by themselves. We're here for those who need us."

A cross-continent perspective on SI came from the San Francisco Examiner. Of all the thousands of visitors who troop through Washington in a year, the article said, "an unfortunate, overwhelming majority" return home without visiting the National Portrait Gallery. The story goes on to list some of the writer's favorite exhibits at NPG.

Evaluating the Past

"The Muses Flee Hitler," a colloquium organized by the Office of Symposia and Seminars on the flight of European intellectuals and artists from the Nazis, attracted in-depth coverage in the Post and Star. The colloquium-linked concert of refugee compositions was praised by Post reviewer Joseph McLellan as "of very high quality" but "too brief."

Calendar

The Smithsonian Calendar for May will appear in the Washington Post and the Washington Star on Friday, April 25.

Renaissance

Ben Forgey in the Star thought the "American Renaissance" show at NCFA was "handsomely installed," while Paul Richard in the Post felt the exhibit was "too vague and too ambitious" but "a useful introduction to a period in our past that deserves much deeper study." Robert Galano in the Post Weekend section felt the show was mounted "in a maze of rooms that frustrates the visitor" but "nevertheless . . . is worth seeing."

EEO

The Washington Afro-American interviewed a Smithsonian spokesman on the Institution's equal opportunity committment for an article in its March 8 issue carrying the headline "Blacks Cite Discrimination at the Smithsonian." The spokesman, who was quoted as saying a number of steps were being taken to advance and train more minority employees, predicted that significant changes in the Institution's employment profile could be anticipated. The weekly newspaper sought the interview after publishing an editorial page column in its Feb. 23 issue concerning an unidentified Smithsonian employee who alleged that she had been passed over for a promotion "merely because of my color." The March 15 issue identified the complainant, said she had filed a class action discrimination suit in District Court and contended that the Feb. 23 column resulted in "numerous responses from frustrated and disgruntled employees."

MHT Brings in Bacon

Reporters from the local newspapers, television stations and numismatic publications attended the ceremony at MHT for the General Services Administration presentation of 426 Carson City silver dollars to the Museum's collections.

People

Smithsonian staffers featured in the news recently: **Dennis Stanford,** MNH, on early man in America, in the March/April issue of Science 80 magazine; **Lucile St. Hoyme,** MNH, on the development of tooth decay, in Candy Wholesaler magazine; **Thomas Soderstrom,** MNH, on bamboo research, in the Salem, Ore., Statesman/Journal; **Joshua Taylor,** NCFA, in a Washington Post article on a group of American art scholars.

Also, **Clyde Roper,** MNH, pictured in the New York Times examining the remains of a giant squid washed ashore in Boston; **Bert Drake,** RBL, on the effect of leaves on surrounding air, in Chemical and Engineering News; **Robert Rosner,** CFA, quoted in the New York Times on the sun's energy processes, and **Roger Kennedy,** MHT, profiled in the Washington Post.

Zora Martin-Felton, ANM, on Channel 20, giving a teaching demonstration on the history of blacks in North America; **J. T. Williams** and **Larry Vaughn,** MMT, in the Arizona Daily Star, and **Owen Gingerich,** CFA, anchoring the Canadian Broadcasting Corporation's four-part radio program, "Ideas," and preparing CBC's three-part series, "Science: Myth or Reality?"

Articles written by Smithsonian people include: "Collectors Versus New Antiques," by **Walter Angst,** CAL, in Curator, the quarterly publication of the American Museum of Natural History; a review by **George B. Field,** CFA, of the book *Cosmical Magnetic Fields*, in Science magazine; "The Einstein Observatory," by **Riccardo Giacconi,** CFA, in Scientific American, and "Stargazing as Done by Computers," by **Trevor Weekes,** CFA, in the Christian Science Monitor.—*Johnnie Douthis*

Winning Print

The Freer Gallery of Art received an Award of Merit in the 1980 Maryland Print Quality Awards Competition for its sales catalog. The booklet sells for $1 at the Freer sales desk.

SITES won a certificate of award for its poster, "America's Architectural Heritage," in the graphic arts competition of Printing Industries of America.

Joseph F. Hayes

Joseph F. Hayes, a supervisory electronic technician in the Radio and Geoastronomy Division of CFA, died on Dec. 1 at the age of 57.

Mr. Hayes, an employee of the Smithsonian Astrophysical Observatory since 1967, devoted his career to building and developing radio astronomy equipment, previously holding positions at Lincoln Lab and the Ewen Knight Corporation. He served in the U.S. Coast Guard from 1942 to 1946.

Books

A writer for the Johnstown, Pa., Tribune Democrat found a local angle in *The American Land*, published last fall by Smithsonian Exposition Books. The article points the "considerable publicity" the book gives to Johnstown, "all related—you guessed it—to floods."

Alan Lightman and George Rybicki, Smithsonian scientists at the Center for Astrophysics, are co-authors of *Radiative Processes in Astrophysics*, published by John Wiley Publishers in 1979. The author got the idea for the $29.50 textbook while teaching at Harvard.

A Washington Post reviewer found *Threads of History: Americana Recorded on Cloth*, by MHT curator Herbert R. Collins, "much like browsing through one of the Smithsonian museums—so rich and extensive is the photographic collection."

The Catalog of the Hans Syz Collection, by Hans Syz, Rainer Ruckert and MHT's J. Jefferson Miller and *The Natural Man Observed: A Study of Catlin's Indian Gallery*, by William Truettner, NCFA, have been selected for inclusion in the 80th Annual Book and Journal Show of the Association for American University Presses. The books, published by the Smithsonian Institution Press, were designed by Natalie Babson and Stephen Kraft, respectively.

A Source Book in Astronomy and Astrophysics 1900-1975 was co-edited by Owen Gingerich of the Center for Astrophysics with K. R. Lang. The book, which sells for $50, was published in 1979 by the Harvard University Press.

A History of the American Locomotive—Its Development: 1830-1880, by John H. White Jr., curator of transportation at MHT, is the result of more than seven years of research. It was published this year by the Johns Hopkins University Press.

Radio Smithsonian

Broadcast on WGMS-AM (570) and WGMS-FM (103.5) Sundays at 9 p.m.

April 6 "From the Amazon to the Himalayas," with naturalist and author George Schaller; and "S.S. Pussiewillow II," with British inventor-sculptor Rowland Emett.

April 13 "American Renaissance," an exhibition at NCFA.

April 20 "Messages from Voyager;" and "The Nation's Attic," a visit to a special exhibition at MHT.

April 27 "A Polar Meltdown?" with climatologist Stephen H. Schneider; and "Georg Jensen Silversmithy."

Q & A

He pushes a button marked "sea noises" and the sound of a bos'n's whistle from Sea-Air Operations in gallery 203 fills the room. Pushing another button brings music by Bach from the art gallery. In fact, electronics technician Rob Martella, or any of his six co-workers in the Air and Space Museum's computer control center, can tune into an audiotape running anywhere in the Museum.

By flicking a switch on one of the eight videotape units, they can monitor film footage of John F. Kennedy committing the United States to the space race, Apollo 11 astronauts on the first mission to the moon, psychedelic-looking cloud formations or any of the other videotapes being shown continually in the exhibits. MACCS—the Museum Automatic Central Control System, hidden away in the basement next to the Missile Pit—constantly monitors 213 such exhibits for malfunctions.

Martella came to the Smithsonian in 1977

Rolfe Baggett

Rob Martella

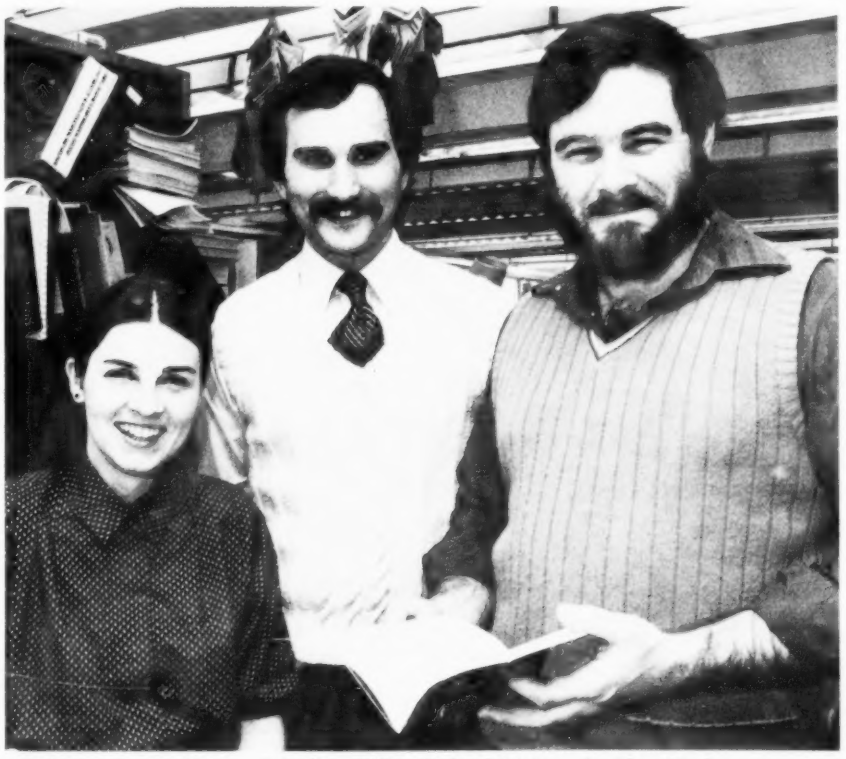
with four years of electronics experience as a sergeant in the Air Force and a bachelor's degree in political science from the University of Connecticut. He was interviewed by Torch staff writer Kathryn Lindeman.

Q. *How sophisticated is MACCS?*
A. NASM is the only museum in the world with a computer like MACCS—it's been the prototype for development of similar systems. It is actually made up of two computers that talk back and forth to each other in a primary-backup relationship. One does all the work and the other make sure it does; if the primary unit malfunctions, the backup computer takes over. This "redundant system" means MACCS has less down time than other computers. The backup constantly diagnoses the prime and when it does take over, it has a base to work on and then becomes the prime system.

Q. *How does the computer let you know an exhibit is not working?*
A. When something goes wrong—say, a film breaks or low current or excessive current are detected—the computer acts by turning off the equipment. In less than a second, the terminal starts to click and a paper printout tells us the time, location, gallery, the problem and what action MACCS has taken. We monitor the computer constantly so that when something malfunctions, we can act immediately.

Q. *Is most of your time spent in correcting exhibit malfunctions?*
A. With 213 exhibits going at one time, you'd think we'd be running around like crazy, but this computer allows us time for other projects—mainly improving exhibits. Our first priority is to maintain certain exhibit standards for the public, which means everything from computer programming to troubleshooting and all the gray areas in between. We work on developing or modifying an electronic or mechanical exhibit, then go change a light bulb or clean a film. You have to be a jack-of-all-trades. It's a real team effort, but we all have our specialties, too. Mine are videotape and film editing, audiotape dubbing and editing, inventory of slides and films—that way we always have replacements on hand so we can keep up the quality. I also maintain the complex graphics display question-and-answer computers in different exhibits.

Q. *How do you improve or modify exhibits?*
A. The flight simulators in Flying for Fun are an example of adapting exhibits for public use. Every day an exhibit has to stand up to about 8 to 12 hours of constant use by visitors; these flight simulators were not built for that. We modified the electronic components, beefed up power supplies, put in trim components to keep the power within certain limits and added special cables—manufactured by our Silver Hill facility—to keep the trainers stable.



Rolfe Baggett

Elephant Press staff, from left: Sue Willis, Richard Molinaroli, Chip Clark.

'Nature' Series Handy at $1

What dazzles with color, doesn't cost much—one buck—and brings back exciting memories of a visit to the Museum of Natural History?

It's *Splendors of Nature*, the fourth in a series of full-color booklets for visitors to permanent exhibits at the Museum.

The series, which also includes *Ice Age Mammals and the Emergence of Man* (1977), *The Insect Zoo* (1978) and *Western Civilization: Origins and Traditions* (1979), is produced by Elephant Press, an in-house publishing venture of the Exhibits Department at MNH. Three staff members, writer-editor Sue Willis, photographer Chip Clark and designer Richard Molinaroli, created the four booklets and are at work on a fifth, *Dynamics of Evolution*.

"Art museums have catalogs to enrich the experience and lasting value of an exhibition, and we hope the Elephant Press books can serve a similar purpose at MNH," Gene Behlen, chief of exhibits, said. "Now, you can take our exhibits home, too. Also, we are keeping the books small and inexpensive to appeal to the school children who flock to MNH."

Each book, except for *Splendors of Nature*, contains a reading list to help in further exploration. The texts are adapted from the label material in the given exhibition hall, and all photographs show objects which are actually on display.

The books are a designer's dream.

Perhaps that's because text and photographs are sized and arranged for maximum visual impact, as Molinaroli explained. With many publications, he noted, text and illustrations are chosen first and design comes later, often to the detriment of appearance.

Printing funds for the first Elephant Press project and for *Splendors of Nature* were provided by the Office of the Director; a group of chemical companies which funded the Insect Zoo sponsored the accompanying booklet, and Reader's Digest donated money to produce *Western Civilization*. Behlen hopes to fund the evolution booklet with proceeds from sales of the first four publications. They sell for $1 in the MNH Museum Shop.

Job Assessment Plans Progress

The proposed Smithsonian performance appraisal plan (see February Torch, Page 6) has been revised, to reflect comments received from the bureaus, and sent to the U.S. Office of Personnel Management for approval. When the plan is okayed, it will be published as Smithsonian Staff Handbook Chapter 430.

Instructions on how to implement the new performance appraisal system have been given to 16 employees nominated by the assistant secretaries to serve as trainers for their organizations.

They are: Gary Gautier, Chuck Ossola and Douglas Ubelaker, Museum of Natural History; Peggy Anderson and Harris Rosenthal, Smithsonian Astrophysical Observatory; Walter J. Boyne, Air and Space Museum; Jaren Horsley, National Zoo; Don Wilhelm, Chesapeake Bay Center; Maurice Margulies, Radiation Biology Laboratory; Jewell B. Dulaney, Office of Assistant Secretary for Public Service; Harold Pfister, Portrait Gallery; Nancy Kirkpatrick, Hirshhorn; Nick Nicastro, Archives of American Art; Tom Wilding, SI Libraries; William M. Clark, Office of Exhibits Central, and G. Clifford Boocks, Office of Protection Services.

Workshops to explain the system will be held for employees in grades 13 through 15, beginning about April 1. These people should work out individual performance plans with their supervisors by May 30. The first formal appraisals will be due in December.

All other supervisors will be scheduled for training later this year, so that every employee will be covered by the system before the October 1981 deadline set forth in the Civil Service Reform Act.

Flora Smithsantha

By James Buckler

". . . a crowd, a host, of golden daffodils," much like those that brightened Wordsworth's solitary strolls, are perking up Smithsonian grounds this spring. There aren't just golden daffodils, though, but a number of varieties.

Thousands of white Mount Hood and yellow King Alfred daffodils, planted by the Office of Horticulture, are blooming in the Victorian Garden. King Alfreds also grace the Museum of History and Technology on the Constitution Avenue side, and the tripleheaded yellow Golden Ducat blooms on the Mall side of the Castle.

The Arts and Industries Building rotunda has already featured paperwhites and King Alfred daffodils during the past few months—the hardy daffodil can be forced during winter months and, of course, grown outdoors in the spring.

Other varieties that can be grown in the Washington area are Celebrity, with soft yellow trumpets on a white flower; Geranium, white flowers with orange-scarlet centers, and Soleil d'Or, yellow with orange cups.

Most daffodil species are natives of southern Europe, but new hybrids—mainly from Holland—are put on the market each year. Daffodils are classified as *Narcissus* and the word "daffodil" itself, from the Dutch "de affodil," is most commonly applied to those *Narcissus* with long trumpets. The name jonquil, however, refers to the rushleaved *Narcissus jonquilla* and its hybrids.

Daffodils can be used in many ways: naturalized in open spaces, woodland, shrubbery or at the edge of a lawn; in rock gardens or alpine greenhouses (miniature varieties are excellent for this); in pots for forcing; as cut or dried flowers.

Daffodils should be planted in the fall, 6 to 8 inches deep depending on bulb size, in any normal soil, in shade or full sun. Unlike tulips, daffodils are considered long-lived bulbs since each year they add new bulblets which will later flower. If you want a naturalistic planting, gather a handful of bulbs and "throw them to the wind," then plant them where they land. Or use an old tree branch and plant the bulbs wherever the branch ends touch the ground.

In a more formal setting, space the bulbs 6 to 8 inches apart in rows in the perennial or cut-flower border. Fertilize after flowering until foliage begins to yellow naturally. Then the leaves may be cut off with shears or lawn-mower.

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Treasury Bulletin

January 1980

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Treasury Bulletin

January 1980

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Note: Details of figures may not add to totals because of rounding.

Treasury Financing Operations

Auctions of 2-Year and 4-Year Notes

On December 12 the Treasury announced that it would auction $6,000 million of 2-year and 4-year notes to refund $5,199 million of notes maturing December 31, 1979, and to raise $801 million new cash. The notes offered were Treasury Notes of Series AB-1981, to be dated December 31, 1979, due December 31, 1981, and Treasury Notes of Series H-1983, to be dated December 31, 1979, due December 31, 1983, with interest payable on June 30 and December 31 in each year until maturity. Coupon rates of 11-3/8% and 10-1/2%, respectively, were set after the determinations as to which tenders were accepted on a yield basis, the averages of which translated into average accepted prices close to 100.000.

Tenders for the 2-year notes were received until 1:30 p.m., EST, December 19 and totaled $8,204 million, of which $3,509 million was accepted at yields ranging from 11.42%, price 99.922 up to 11.44%, price 99.887. Noncompetitive tenders for $1 million or less from any one bidder were accepted in full at the average yield of accepted competitive tenders, 11.43%, price 99.904. These totaled $864 million.

In addition to the $3,509 million of tenders accepted in the auction process, $571 million of tenders were accepted at the average price from Federal Reserve banks for their own account in exchange for maturing securities, and $134 million of tenders were accepted at the average price from Federal Reserve banks as agents for foreign and international monetary authorities for new cash.

Tenders for the 4-year notes were received until 1:30 p.m., EST, December 20 and totaled $4,118 million, of which $2,501 million was accepted at yields ranging from 10.39%, price 100.353, up to 10.46%, price 99.681. Noncompetitive tenders for $1 million or less from any one bidder were accepted in full at the average yield of accepted competitive tenders, 10.52%, price 99.936. These totaled $441 million.

In addition to the $2,501 million of tenders accepted in the auction process, $156 million of tenders were accepted at the average price from Federal Reserve banks for their own account in exchange for maturing securities.

Tenders were received in both auctions at Federal Reserve banks and branches and at the Bureau of the Public Debt, Washington, D. C. Bearer notes, with interest coupons attached, and notes registered as to principal and interest were authorized to be issued in denominations of $5,000, $10,000, $100,000 and $1,000,000 in the case of the 2-year notes and $1,000, $5,000, $10,000, $100,000 and $1,000,000 in the case of the 4-year notes.

Auction of 15-Year 1-Month Bonds

On December 28 the Treasury announced that it would auction $1,500 million of 15-year 1-month bonds to raise new cash. The bonds offered were Treasury Bonds of 1995, to be dated January 10, 1980, due February 15, 1995, with interest payable on August 15 and February 15 in each year until maturity. A coupon rate of 10-1/2% was set after the determination as to which tenders were accepted on a yield basis, the average of which translated into an average accepted price close to 100.000.

Tenders for the bonds were received until 1:30 p.m., EST, January 3 and totaled $3,724 million, of which $1,501 million was accepted at yields ranging from 10.58%, price 99.352 up to 10.61%, price 99.130. Noncompetitive tenders for $1 million or less from any one bidder were accepted in full at the average yield of accepted tenders, 10.60%, price 99.204. These totaled $85 million.

Tenders were received at Federal Reserve banks and branches and at the Bureau of the Public Debt, Washington, D. C. Bearer bonds, with interest coupons attached, and bonds registered as to principal and interest were authorized to be issued in denominations of $1,000, $5,000, $10,000, $100,000 and $1,000,000.

52-Week Bills

On December 27 tenders were invited for approximately $4,000 million of 360-day Treasury bills to be dated January 8, 1980, and to mature January 2, 1981. The issue was to refund $3,[illegible] million of bills maturing January 8 and to raise $295 million new cash. Tenders were opened on January 2. They totaled $6,322 million, of which $4,001 million was accepted, including $195 million of noncompetitive tenders from the public and $1,501 million of the bills issued at the average price to Federal Reserve banks for themselves and as agents for foreign and international monetary authorities. The average bank discount rate was 11.040%. An additional $7 million of the bills was issued to Federal Reserve banks as agents for foreign and international monetary authorities for new cash.

13-Week and 26-Week Bills

Issues of regular weekly Treasury bills in December totaled $25,600 million. These issues were offered for cash and in exchange for bills maturing in the amount of $23,600 million. There were four 13-week issues of $3,200 million and four 26-week issues of $3,200 million. Average rates for the new issues are shown in the following table.

Treasury Financing Operations--Continued

Date of issue	Annual average rate (bank discount basis)	
1979	13-week	26-week
December 6	11.928	11.767
13	12.054	11.769
20	12.228	11.999
27	12.074	11.854

Treasury Bills (Other than Cash management bills) - General

Treasury bills are sold on a discount basis under competitive and noncompetitive bidding, and at maturity their par amount is payable without interest. All series are issued entirely in book-entry form in a minimum amount of $10,000 and in any higher $5,000 multiple, on the records of the Federal Reserve Banks and Branches, or of the Department of the Treasury.

Tenders are received at Federal Reserve banks and branches and from individuals at the Bureau of the Public Debt, Washington. Each tender must be for a minimum of $10,000. Tenders over $10,000 must be in multiples of $5,000. Payment for the full par amount applied for must accompany all tenders submitted for bills to be maintained on the book-entry records of the Department of the Treasury. A cash adjustment will be made for the difference between the par payment submitted and the actual issue price as determined in the auction. No deposit need accompany tenders from incorporated banks and trust companies and from responsible and recognized dealers in investment securities for bills to be maintained on the book-entry records of Federal Reserve Banks and Branches. A deposit of 2 percent of the par amount of the bills applied for must accompany tenders for such bills from others, unless an express guaranty of payment by an incorporated bank or trust company accompanies the tenders.

Noncompetitive tenders (without stated price), usually for $500,000 or less from any one bidder, for each issue of 13-week, 26-week, and 52-week bills, are accepted in full at the weighted average price of accepted competitive bids for an issue.

Payment for accepted tenders must be made or completed on the date of issue, in cash or other immediately available funds or in a like par amount of Treasury securities maturing on or before that date. Payment for 13-week, 26-week, and 52-week bills may not be made by credit in Treasury tax and loan accounts.

Nonmarketable Foreign Series Securities - Foreign Governments

Dollar-denominated foreign series securities issued to official institutions in December totaled $2,100 million, consisting of 5 notes and 15 certificates of indebtedness. Redemptions during the month totaled $2,445 million. At the end of December, dollar-denominated foreign series securities outstanding totaled $23,551 million. (Details are shown on page 65 .)

Note: Details of figures may not add to totals because of rounding.

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FEDERAL FISCAL OPERATIONS

Table FFO-1. - Summary of Fiscal Operations

(In millions of dollars)

Fiscal year or month	Budget receipts and outlays			Means of financing--net transactions								
				Borrowing from the public--Federal securities				Cash and monetary assets (Deduct)				
	Net receipts 1/	Net outlays 2/	Surplus or deficit (-) 1-2	Public debt securities	Agency securities	Investments of Government accounts 4/	Total 4+5+6	Within general account of the U.S. Treasury 5/	U.S. Treasury operating cash	Special drawing rights 6/	Other	Gold tranche drawing rights 7/
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1971	188,392	211,425	-23,033	27,211	-347	7,417	19,448	826	-	290	-208	-908
1972	208,649	232,021	-23,372	29,131	-1,269	8,420	19,442	1,668	-	711	1,079	-988
1973	232,225	247,074	-14,849	30,881	216	11,822	19,275	2,068	-	-8	-1,264	50
1974	264,932	269,620	-4,689	16,918	903	14,813	3,009	-3,380	-	245	91	525
1975	280,997	326,185	-45,188	58,953	-1,069	7,031	50,853	-	-1,570	123	647	1,121
1976	300,006	366,439	-66,434	87,244	10	4,341	82,913	-	7,246	-302	-172	1,024
T.Q.	81,773	94,729	-12,956	14,269	724	-3,514	18,507	-	2,579	-39	-385	764
1977	357,762	402,725	-44,963	64,139	-1,380	9,243	53,516	-	1,690	-267	684	132
1978	401,997	450,836	-48,839	72,705	-1,417	12,181	59,106	-	3,340	352	-75	-594
1979	465,940	493,221 3/	-27,281 3/	54,975	-1,649	19,685	33,641	-	1,732	-716	1,629	-2,237
1980 (Est.)	513,865	547,092	-33,227	n.a.	n.a.	n.a.	42,887	-	n.a.	n.a.	n.a.	n.a.
1978-Nov	33,227	39,187r	-5,961r	6,632	-336	1,060	5,236	-	-2,691	-1,575	3,803	-3,022
Dec	37,477	41,392	-3,915	6,181	-50	2,599	3,533	-	3,438	36	-1,478	327
1979-Jan	38,364	41,095	-2,731	1,247	-208	-2,273	3,312	-	-1,146	1,103	298	-28
Feb	32,639	37,739	-5,100	1,753	-16	2,405	-668	-	-8,258	11	-28	97
Mar	31,144	43,725	-12,581	4,585	-432	-3,858	8,012	-	798	-5	-18	4
Apr	52,230	40,752	11,478	-409	-168	4,387	-4,965	-	657	-65	2,417	-18
May	38,287	41,618	-3,331	8,411	-237	6,368	1,806	-	-3,685	-478	-1,457	93
June	53,910	40,687	13,223	119	-92	1,484	-1,458	-	12,828	46	160	11
July	33,268	40,482	-7,214	2,564	-71	-2,338	4,831	-	-3,955	19	-773	-3
Aug	39,353	54,279	-14,926	5,663	-18	2,378	3,268	-	-6,580	-*	-29	75
Sept	47,295	29,625	17,670	13,379	-13	9,116	4,250	-	17,226	36	-689	-11
Oct	33,099	47,807	-14,708	268	-19	-1,968	2,217	-	-13,716	-66	-403	-34
Nov	38,320	46,841	-8,522	7,046	-80	1,418	5,548	-	-4,869	46	201	89
Fiscal 1980 to date	71,419	94,649	-23,230	7,314	-100	-551	7,765	-	-18,585	-20	-202	55

Fiscal year or month	Means of financing--net transactions --Con.			Selected balances, end of period					
						Federal securities			
	Other 8/	Transactions not applied to year's surplus or deficit 9/	Total budget financing 7+8+9+10 -11-12+13+14	General account of the U.S. Treasury 5/	U.S. Treasury operating cash	Public debt securities	Agency securities 10/	Investments of Government accounts	Held by the public 18+19-20
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1971	3,103	482	23,033	10,117	-	397,305	14,163	105,140	304,328
1972	4,958	1,442	23,372	11,785	-	426,435	13,894	113,559	325,770
1973	-3,921	340	14,849	13,854	-	437,317	11,109	125,381	343,045
1974	-1,290	451	4,689	10,473	-	474,235	11,012	140,194	346,053
1975	1,968	-7,312	45,188	-	7,589	533,188	10,943	147,225	396,906
1976	-1,956	-6,727	66,434	-	14,835	620,432	10,953	151,566	479,819
T.Q.	-199	-2,453	12,956	-	17,414	634,701	11,678	148,052	498,327
1977	2,004	-8,318	44,963	-	19,104	698,840	10,298	157,295	551,843
1978	2,246	-9,490	48,839	-	22,444	771,544	8,881	169,477	610,948
1979	2,945	-8,897	27,281	-	24,176	826,519	7,232	189,162	644,589
1980 (Est.)	n.a.	n.a.	33,227	-	-	n.a.	n.a.	n.a.	n.a.
1978-Nov	-2,336r	425r	5,961r	-	12,854	783,026	8,537	168,894	622,669
Dec	3,338	-633	3,915	-	16,291	789,207	8,487	171,492	626,202
1979-Jan	78	-432	2,731	-	15,146	790,454	8,279	169,220	629,513
Feb	-1,849	-561	5,100	-	6,887	792,207	8,263	171,625	628,845
Mar	6,061	-713	12,581	-	7,685	796,792	7,832	167,767	636,857
Apr	-2,254	-1,268	-11,478	-	8,342	796,383	7,669	172,153	631,893
May	-2,875	-1,128	3,331	-	4,657	804,794	7,426	178,522	633,699
June	2,942	-1,662	-13,223	-	17,485	804,913	7,334	180,006	632,241
July	-1,641	-687	7,214	-	15,330	807,477	7,263	177,668	637,072
Aug	5,905	-781	14,926	-	6,950	813,140	7,845	180,045	640,340
Sept	-3,534	-1,823	-17,670	-	24,176	826,519	7,232	189,162	644,589
Oct	-2,121	392	14,708	-	10,460	826,787	7,213	187,193	646,806
Nov	-1,901	342	8,522	-	5,591	833,833	7,132	188,611	652,356
Fiscal 1980 to date	-4,022	734	23,230	-	5,591	833,833	7,132	188,611	652,356

Footnotes on following page.

Footnotes to Table FFO.-1.

Source: Monthly Treasury Statement of Receipts and Outlays of the United States Government.
Note: Budget estimates are based on the revision of the Mid-Session Review of the 1980 Budget released on July 31, 1979; adjusted to include revised estimates for the Energy Security Program and Department of Defense increases.
1/ For detail see Table FFO-2.
2/ For detail see Table FFO-3.
3/ The joint Treasury-Office of Management and Budget Press Statement, released with the Monthly Treasury Statement, has adjusted these totals to include operating expenses and interest receipts of the Exchange Stabilization Fund. The totals in the press release are $493.6 billion for outlays and $-27.7 billion for the deficit.
4/ For detail see Table FFO-6.
5/ Beginning fiscal 1975, balances "Within general account of the U.S. Treasury" are presented in columns 9 and 13.
6/ Represents holdings of special drawing rights, less certificates issued to Federal Reserve banks.
7/ Represents activity of the International Monetary Fund.
8/ Includes: public debt accrued interest payable to the public, deposit funds, miscellaneous asset and liability accounts, and as of July 1974, the gold balance.
9/ Includes: Seigniorage; increment of gold; fiscal 1969 conversions of certain corporations to private ownership; fiscal 1970 reclassification of Commodity Credit Corporation certificates of interest; fiscal 1974 conversion of interest receipts of Government accounts to an accrual basis; and net outlays of off-budget Federal agencies. Also includes rural electrification and telephone revolving fund since May 12, 1973, Postal Service fund since July 1973, Federal Financing Bank since July 1974, housing for the elderly or handicapped fund from August 22, 1974, through September 30, 1977 and Pension Benefit Guaranty Corporation since September 17, 1974.
10/ For detail see Table FD-6.
n.a. Not available. r Revised.

FEDERAL FISCAL OPERATIONS

Table FFO-2. - Budget Receipts by Source

(In millions of dollars)

Fiscal year or month	Net budget receipts	Income taxes								Social insurance taxes and contributions		
		Individual				Corporation			Net income taxes	Employment taxes and contributions		
		Withheld 1/	Other	Refunds	Net	Gross	Refunds	Net		Old-age, disability, and hospital insurance		
										Gross	Refunds	Net
1971	188,392	76,490	24,262	14,522	86,230	30,320	3,535	26,785	113,015	41,237	518	40,719
1972	208,649	83,200	25,679	14,143	94,737	34,926	2,760	32,166	126,903	45,559	447	45,111
1973	232,225	98,093	27,019	21,866	103,246	39,045	2,893	36,153	139,153	54,166	479	53,687
1974	264,932	112,092	30,812	23,952	118,952	41,744	3,125	38,620	157,571	65,016	535	64,481
1975	280,997	122,071	34,328	34,013	122,386	45,747	5,125	40,621	163,007	74,075	360	73,715
1976	300,006	123,441	35,528	27,367	131,603	46,783	5,374	41,409	172,204	78,792	408	78,384
T.Q.	81,773	32,950	6,809	938	38,801	9,809	1,348	8,460	47,175	21,475	-	21,475
1977	357,762	144,857	42,062	29,293	157,626	60,057	5,164	54,892	212,512	90,701	400	90,310
1978	401,997	165,234	47,804	32,070	180,988	65,380	5,428	59,952	240,940	102,389	518	102,071
1979	465,940	195,331	56,215	33,705	217,841	71,448	5,771	65,677	283,518	118,521	636	117,884
1980 (Est.)	513,865	202,716	65,581	40,974	234,165	76,913	5,926	71,210	305,375	137,131	519	136,612
1978-Nov	33,227	16,268	533	192	16,609	1,541	493	1,048	17,657	9,443	-	9,443
Dec	37,477	15,454	830	219	16,066	10,769	382	10,386	26,452	6,880	-	6,880
1979-Jan	38,364	15,844	7,866	42	23,667	2,538	392	2,146	25,814	8,390	-	8,390
Feb	32,639	16,297	1,037	2,825	14,509	1,706	424	1,281	15,790	11,529	-	11,529
Mar	31,144	16,204	3,119	11,068	8,255	9,879	578	9,301	17,556	9,446	-	9,446
Apr	52,230	15,544	17,975	8,489	25,029	10,418	651	9,767	34,796	11,965	-	11,965
May	38,287	16,742	5,696	7,864	14,575	1,870	467	1,403	15,978	12,925	-	12,925
June	53,910	18,084	8,424	940	25,568	16,016	376	15,640	41,208	9,312	636	8,675
July	33,268	16,714	1,241	869	17,086	2,518	499	2,019	19,105	8,784	-	8,784
Aug	39,353	16,955	1,041	781	17,215	1,661	293	1,368	18,583	13,217	-	8,784
Sept	47,295	16,194	7,349	201	23,341	10,096	463	9,633	32,975	10,087	-	10,087
Oct	33,099	17,777	1,183	278	18,682	2,543	1,068	1,476	20,158	7,957	-	7,957
Nov	38,320	18,725	589	342	18,972	1,684	524	1,160	20,133	11,899	-	11,899
Fiscal 1980 to date	71,419	36,502	1,772	620	37,655	4,227	1,591	2,636	40,291	19,856	-	19,856

Fiscal year or month	Social insurance taxes and contributions - Continued										
	Employment taxes and contributions - Con.				Unemployment insurance			Net contributions for other insurance and retirement			
	Railroad retirement accounts			Net employment taxes and contributions	Gross	Refunds	Net unemployment insurance	Federal supplementary medical insurance	Federal employees retirement	Other retirement	Total
	Gross	Refunds	Net								
1971	981	*	980	41,699	3,682	8	3,674	1,253	1,916	37	3,207
1972	1,009	1	1,008	46,120	4,370	13	4,357	1,340	2,058	39	3,437
1973	1,190	1	1,189	54,876	6,070	19	6,051	1,427	2,146	41	3,614
1974	1,412	*	1,411	65,892	6,863	26	6,837	1,704	2,302	45	4,051
1975	1,490	*	1,489	75,204	6,804	33	6,771	1,901	2,513	52	4,466
1976	1,525	*	1,525	79,909	8,085	32	8,054	1,937	2,760	54	4,752
T.Q.	328	*	328	21,803	2,704	6	2,698	539	706	13	1,258
1977	1,909	*	1,908	92,210	11,347	36	11,312	2,193	2,915	59	5,167
1978	1,823	1	1,822	103,893	13,892	42	13,850	2,431	3,174	62	5,668
1979	2,190	*	2,190	120,074	15,438	51	15,387	2,636	3,428	66	6,130
1980(Est.)	2,539	*	2,539	140,006	15,916	61	16,140	2,909	3,472	66	6,454
1978-Nov	319	*	319	9,762	1,664	2	1,662	212	282	5	499
Dec	179	*	179	7,059	176	1	174	209	269	5	483
1979-Jan	49	*	49	8,439	479	1	478	229	270	5	512
Feb	322	*	321	11,850	1,287	1	1,286	215	258	5	478
Mar	190	-	190	9,636	204	6	198	225	307	8	540
Apr	79	-	79	12,044	1,623	15	1,608	223	284	6	513
May	324	-	324	13,250	4,872	8	4,864	219	315	3	538
June	21	*	20	8,696	197	8	188	214	270	7	491
July	73	*	72	8,857	1,207	3	1,204	224	276	4	504
Aug	360	-*	360	13,577	2,849	3	2,847	25	309	6	740
Sept	223	-*	223	10,310	157	2	154		304	6	364
Oct	55	*	55	8,013	842	1	840	246	278	6	530
Nov	360	-*	360	12,259	1,652	2	1,650	236	286	1	524
Fiscal 1980 to date	415	-*	415	20,272	2,494	3	2,491	482	364	8	1,056

FEDERAL FISCAL OPERATIONS

Table FFO-2. - Budget Receipts by Source—Continued

(In millions of dollars)

Fiscal year or month	Social insurance taxes and contributions-Continued	Excise taxes								
		Miscellaneous			Airport and airway trust fund			Highway trust fund		
	Net social insurance taxes and contributions	Gross	Refunds	Net	Gross	Refunds	Net	Gross	Refunds	Net
1971	48,578	10,643	133	10,510	564	2	563	5,664	123	5,542
1972	53,914	10,562	1,056	9,506	650	1	649	5,635	313	5,322
1973	64,542	9,995	158	9,836	760	2	758	5,818	153	5,665
1974	76,780	9,884	141	9,743	842	2	840	6,384	123	6,260
1975	86,441	9,550	150	9,400	964	1	962	6,334	146	6,188
1976	92,714	10,753	141	10,612	940	2	938	5,565	152	5,413
T.Q	25,759	2,564	44	2,520	277	1	277	1,677	1	1,676
1977	108,688	9,796	148	9,648	1,193	2	1,191	6,844	135	6,709
1978	123,410	10,203	149	10,054	1,328	2	1,326	7,042	137	6,904
1979	141,591	9,978	169	9,808	1,528	2	1,526	7,322	133	7,189
1980 (Est.)	161,321	9,275	152	9,123	1,619	2	1,617	7,602	136	7,466
1978-Nov	11,923	882	15	868	141	*	140	686	-1	688
Dec	7,716	872	10	861	125	-	125	591	-	591
1979-Jan	9,429	811	17	795	117	-	117	588	-	588
Feb	13,614	718	+33	751	108	*	108	587	23	564
Mar	10,373	804	58	746	112	*	112	567	12	555
Apr	14,165	874	13	861	125	*	125	611	85	526
May	18,652	851	11	840	122	*	122	627	2	625
June	9,375	684	13	671	133	*	133	658	12	646
July	10,566	952	13	937	144	-	144	560	-	560
Aug	17,164	672	16	657	143	*	143	668	1	667
Sept	10,809	960	19	941	134	-	134	567	-	567
Oct	9,384	838	17	821	129	-	129	579	-	579
Nov	14,433	848	9	839	163	1	162	609	2	608
Fiscal 1980 to date	23,817	1,687	26	1,660	292	1	292	1,188	2	1,186

Fiscal year or month	Excise taxes - Continued				Estate and gift taxes			Customs duties			Net miscellaneous receipts		
	Black lung disability trust fund 4/			Net excise taxes							Deposits of earnings by Federal Reserve banks	All other	Total
	Gross	Refunds	Net		Gross	Refunds	Net	Gross	Refunds	Net			
1971	-	-	-	16,614	3,784	49	3,735	2,657	66	2,591	3,533	325	3,858
1972	-	-	-	15,477	5,490	54	5,436	3,394	107	3,287	3,252	380	3,633
1973	-	-	-	16,260	4,976	59	4,917	3,308	120	3,188	3,495	426	3,921
1974	-	-	-	16,844	5,101	66	5,035	3,444	110	3,334	4,845	523	5,369
1975	-	-	-	16,551	4,688	77	4,611	3,782	106	3,676	5,777	935 2/	6,711
1976	-	-	-	16,963	5,307	91	5,216	4,209	134	4,074	5,451	2,576 3/	8,026
T.Q	-	-	-	4,473	1,485	31	1,455	1,243	31	1,212	1,500	112	1,613
1977	-	-	-	17,568	7,425	98	7,327	5,287	137	5,150	5,908	623	6,531
1978	92	-	92	18,376	5,381	96	5,285	6,729	156	6,573	6,641	772	7,413
1979	222	-	222	18,745	5,519	109	5,411	7,640	201	7,439	8,327	910	9,237
1980 (Est.)	249	-	249	21,610	6,111	100	5,709	8,642	195	8,143	8,600	1,278	10,428
1978-Nov	17	-	17	1,712	469	9	460	657	11	646	734	96	829
Dec	20	-	20	1,597	395	9	386	613	19	594	674	58	732
1979-Jan	20	-	20	1,520	489	4	485	645	15	630	410	76	486
Feb	14	-	14	1,436	441	15	426	540	13	527	748	97	846
Mar	20	-	20	1,434	455	6	449	633	12	621	637	74	712
Apr	17	-	17	1,329	332	8	323	644	21	623	730	64	794
May	14	-	14	1,601	569	10	559	663	18	645	749	103	852
June	14	-	14	1,464	422	8	414	656	20	637	750	61	811
July	17	-	17	1,659	475	12	463	663	16	647	737	91	828
Aug	31	-	31	1,497	539	6	533	708	19	689	808	78	886
Sept	18	-	18	1,660	445	11	434	583	24	559	801	38	859
Oct	18	-	18	1,547	535	9	526	673	27	646	745	93	838
Nov	44	-	44	1,653	527	8	518	623	18	605	887	90	977
Fiscal 1980 to date	62	-	62	3,200	1,062	18	1,044	1,297	45	1,251	1,633	183	1,815

Source: Monthly Treasury Statement of Receipts and Outlays of the United States Government.

Note: Budget estimates for net receipts are based on the revision of the Mid-Session Review of the 1980 Budget released on July 31, 1979. Estimates in detail are not available and are based on the 1980 Budget of the U.S. Government, released January 22, 1979.

1/ Includes individual income taxes designated for the Presidential election campaign fund. Prior to February 1974, these taxes were included in "Other".

2/ Includes $442,615 thousand in fees for licenses to import petroleum and petroleum products.

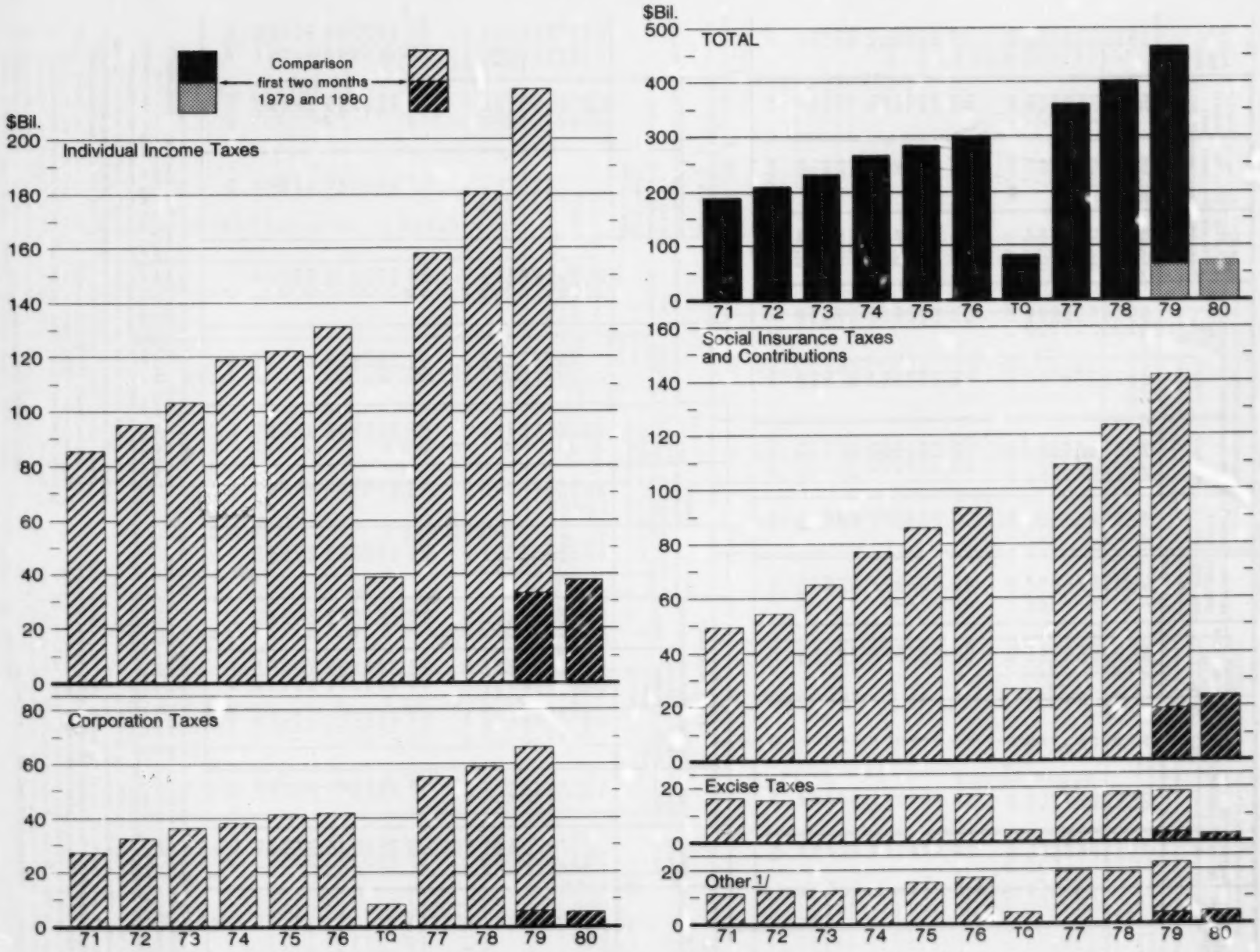
3/ Includes $1,670 million in fees for licenses to import petroleum and petroleum products.

4/ The Black Lung Disability Trust Fund was formally created on April 1, 1978 pursuant to the "Black Lung Benefits Revenue Act of 1977" (Public Law 95-227).

* Less than $500,000.

BUDGET RECEIPTS BY SOURCE

Fiscal Years 1971-1980



Source: Monthly Treasury Statement of Receipts and Outlays of the U.S. Goverment. For actual amounts see preceding Table FFO-2.

1/ Includes estate and gift taxes, customs duties, and miscellaneous receipts.

FEDERAL FISCAL OPERATIONS

Table FFO-3. - Budget Outlays by Agency

(In millions of dollars)

Fiscal year or month	Legislative branch	The judiciary	Executive Office of the President	Funds appropriated to the President	Agriculture Department	Commerce Department	Defense Department		Energy Department 1/ 2/	Health, Education, & Welfare Department	Housing & Urban Development Department	Interior Department 2/ 3/	Justice Department
							Military	Civil					
1971	384	142	47	4,340	8,560	1,188	74,346	1,376	2,439	61,866	2,890	225	916
1972	487	173	55	4,269	10,943	1,250	75,150	1,330	2,545	71,779	3,642	1,256	1,180
1973	540	183	49	3,733	10,028	1,368	73,297	1,703	2,558	82,042	3,592	-2,236	1,531
1974	625	205	75	4,015	9,767	1,455	77,625	1,682	2,493	93,735	4,786	-4,881	1,797
1975	726	284	93	3,572	9,725	1,583	85,420	2,051	3,524	112,411	7,475	2,162	2,067
1976	779	325	79	3,525	12,796	2,020	88,036	2,124	3,888	128,785	7,079	2,293	2,242
T.Q.	225	85	16	1,221	3,850	534	21,926	583	1,000	34,341	1.394	788	551
1977	976	392	73	2,487	16,738	2,607	95,650	2,280	5,252	147,455	5,838	3,152	2,350
1978	1,049	435	75	4,450	20,368	5,239	103,042	2,553	6,286	162,856	7,589	3,821	2,397
1979	1,077	480	80	2,537	20,634	4,072	115,013	2,908	7,889	181,186	9,218	4,087	2,522
1980 (Est.)	1,289	586	92	7,496	18,351	3,289	127,400	3,041	9,351	202,216	10,772	3,781	2,516
1978-Nov	78	49	6	-170r	2,654	475r	9,216r	289	631r	14,512	487r	317r	255
Dec	86	30	4	273	2,859	418	9,383	245	677	15,017	844	266	176
1979-Jan	92	35	8	356	3,322	355	9,218	218	571	14,416	807	246	229
Feb	79	78	4	335	1,712	315	8,920	170	683	14,584	622	465	183
Mar	89	42	6	502	1,724	299	9,979	177	771	15,762	831	264	210
Apr	87	53	12	127	1,999	288	9,329	197	589	14,728	552	299	203
May	90	33	5	557	1,178	323	9,830	212	710	15,384	818	488	237
June	95	32	6	79	330	301	9,838	246	755	15,282	933	207	203
July	96	38	8	-524	1,093	276	10,256	282	650	15,034	779	264	210
Aug	97	55	8	396	913	258	10,347	305	743	25,930	1,009	503	215
Sept	84	34	5	348	904	278	9,353	347	685	6,413	826	458	191
Oct	89	36	7	878	1,712	346	10,180	348	496	16,389	1,153	332	255
Nov	97	38	6	848	1,870	265	10,363	300	791	16,764	1,535	23	229
Fiscal 1980 to date	186	93	13	1,726	3,582	610	20,744	648	1,287	33,154	2,698	355	483

Fiscal year or month	Labor Department	State Department	Transportation Department	Treasury Department		Environmental Protection Agency	General Services Administration	National Aeronautics and Space Admin.	Veterans Administration	Other independent agencies 2/	Undistributed Offsetting Receipts 3/ 5/		Total 6/
				Interest on the public debt 4/	Other 2/						Rents and Royalties on the Outer Continental Shelf lands	Other	
1971	7,923	468	7,247	20,959	31	701	501	3,381	9,756	8,715	-	-7,376	211,425
1972	10,033	568	7,531	21,849	275	763	589	3,422	10,710	9,878	-	-7,858	232,021
1973	8,639	591	8,183	24,167	6,792	1,114	468	3,311	11,968	11,832	-	-8,379	247,074
1974	8,966	730	8,112	29,319	6,674	2,032	-276	3,252	13,337	13,988	-	-9,893	269,620
1975	17,649	844	9,247	32,665	8,605	2,530	-624	3,267	16,575	18,433	-2,428	-11,670	326,185
1976	25,742	1,061	11,936	37,063	7,256	3,118	-92	3,670	18,415	19,003	-2,662	-12,042	366,439
T.Q.	5,905	316	3,003	8,102	1,584	1,108	3	953	3,957	5,851	-1,311	-1,255	94,729
1977	22,374	1,076	12,514	41,900	8,484	4,365	-31	3,944	18,019	19,884	-2,374	-12,679	402,725
1978	22,896	1,252	13,452	48,695	7,660	4,071	83	3,980	18,962	25,396	-2,259	-13,514	450,836
1979	22,650	1,548	15,486	59,837	4,759	4,800	173	4,187	19,887	26,682	-3,267	-15,222	493,221
1980 (Est.)	26,358	1,905	16,369	67,600	3,089	4,764	133	4,792	20,826	29,442 6/	-2,265	-16,392	547,092
1978-Nov	1,465	136	1,293	4,146	-100r	342	75	350	1,665	1,730r	-117	-395	39,188r
Dec	1,637	30	1,192	8,138	-659	367	116	333	2,648	2,180	-143	-4,727	41,392
1979-Jan	2,043	107	1,295	4,112	956	430	-192	354	754	1,849	-147	-369	41,095
Feb	1,895	139	934	4,320	150	366	37	365	1,620	1,295	-958	-573	37,739
Mar	2,321	116	1,193	4,281	118	379	128	389	2,715	2,033	-116	-487	43,725
Apr	1,973	116	1,181	4,385	1,978	374	-147	198	837	2,057	-116	-548	40,752
May	1,990	96	1,149	4,663	55	396	91	366	1,691	2,012	-154	-601	41,618
June	1,824	82	1,176	8,638	-434	414	112	389	2,495	2,392	-118	-4,812	40,687
July	2,097	102	1,443	4,301	1,256	456	-56	341	664	2,148	-387	-366	40,482
Aug	2,240	348	1,518	4,671	-89	461	81	413	2,556	2,205	-316	-787	54,279
Sept	1,835	122	1,462	4,360	-329	424	90	387	597	2,384	-600	-1,055	29,625
Oct	1,701	255	1,746	4,653	1,582	521	-186	384	1,807	3,795	-138	-584	47,807
Nov	1,697	138	1,548	5,330	-285	452	50	415	2,698	2,522	-121	-931	46,841
Fiscal 1980 to date	3,397	394	3,293	9,983	1,297	973	-116	799	4,305	6,317	-259	-1,515	94,649

Source: Monthly Treasury Statement of Receipts and Outlays of the United States Government. Budget estimates are based on the revision of the Mid-Session Review of the 1980 Budget released on July 31, 1979.

Note: Outlays consist of disbursements less proprietary receipts from the public and certain intrabudgetary transactions. Agency shifts are shown in this table beginning with the period of such shifts; figures prior to the shifts have been adjusted.

1/ Pursuant to Public Law 95-91, as of October 1, 1977, all functions of the Energy Research and Development Administration, Federal Energy Administration, and Federal Power Commission, and certain functions of Interior (Bonneville Power Administration and other Power administrations), certain other departments, and the Interstate Commerce Commission were transferred to the Energy Department.

2/ Cumulative year to date figures may not add due to budget realignments.

3/ Prior to January 1975, Rents and royalties on the Outer Continental Shelf lands were shown as proprietary receipts from the public for the Interior Department. To conform with the FY 1976 Budget Document's presentation, these amounts were reclassified and are now being shown as undistributed offsetting receipts.

4/ Reported on an annual basis.

5/ For content see Table FFO-4. 6/ Includes undistributed allowances.

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FEDERAL FISCAL OPERATIONS

Table FFO-4. - Undistributed Offsetting Receipts

(In millions of dollars)

Fiscal year or month	Federal employer contributions to retirement funds				Interest credited to certain Government accounts				
	Health, Education, and Welfare Dept.	Office of Personnel Management	Other 1/	Total	Defense Department	Health, Education, and Welfare Department			
	Federal Old-Age, Disability and Hospital Insurance	Civil Service Retirement and Disability Fund			Soldiers' & Airmen's Home Permanent Fund	Federal Old-Age and Survivors Insurance Trust Fund	Federal Disability Insurance Trust Fund	Federal Hospital Insurance Trust Fund	Federal Supplementary Medical Insurance
1971	727	1,876	8	2,611	3	1,617	324	183	17
1972	742	2,018	9	2,768	3	1,718	388	190	29
1973	816	2,101	10	2,927	3	1,848	435	198	43
1974	911	1,756	652	3,319	4	2,039	479	406	77
1975	1,082	1,918	980	3,980	7	2,296	512	607	104
1976	1,138	2,080	1,024	4,242	6	2,346	467	708	104
T.Q.	294	592	99	985	1	80	13	5	4
1977	1,152	2,192	1,204	4,548	6	2,275	374	770	132
1978	1,266	2,427	1,170	4,863	6	2,133	249	780	229
1979	1,342	2,511	1,417	5,271	8	1,919	303	868	362
1980 (Est)	1,428	2,645	1,408	5,476	7	1,660	402	1,063	336
1978-Nov	102	210	50	364	-	80	7	9	4
Dec	103	350	53	508	2	730	112	398	144
1979-Jan	109	214	55	378	-	11	2	7	2
Feb	112	187	63	362	-	77	12	4	3
Mar	117	176	89	383	2	34	5	9	10
Apr	107	251	69	427	-	57	8	5	7
May	119	200	50	369	-	55	7	13	14
June	118	206	60	384	2	683	128	410	161
July	117	198	58	373	-	13	2	4	2
Aug	122	353	90	565	-	89	13	2	4
Sept	118	125	718	960	2	32	3	4	4
Oct	108	303	59	470	-	39	5	7	4
Nov	111	227	63	400	-	95	10	7	4
Fiscal 1980 to date	219	529	122	870	-	154	15	15	8

Fiscal year or month	Interest credited to certain Government accounts - Continued									Rent and royalties on the Outer Continental Shelf lands 3/	Grand Total
	Labor Department		Transportation Department	Veterans Administration		Office of Personnel Management	Railroad Retirement Board	Other 2/	Total 3/		
	Unemployment Trust Fund	Black Lung Disability Trust Fund	Highway Trust Fund	Government Life Insurance Fund	National Service Life Insurance Fund	Civil Service Retirement and Disability Fund					
1971	637	-	184	31	271	1,232	251	14	4,765	-	7,376
1972	496	-	248	32	292	1,464	258	12	5,089	-	7,858
1973	487	-	247	31	309	1,566	262	23	5,452	-	8,378
1974	650	-	415	31	338	1,838	257	40	6,574	-	9,893
1975	639	-	586	31	368	2,136	274	130	7,690	2,628	14,098
1976	283	-	587	31	398	2,463	246	162	7,800	2,662	14,704
T.Q.	55	-	13	*	8	71	16	3	270	1,311	2,567
1977	232	-	593	32	433	2,841	230	213	8,131	2,374	15,053
1978	266	1	662	32	460	3,356	209	246	8,651	2,259	15,772
1979	503	*	853	34	529	4,053	192	325	9,951	3,267	18,489
1980 (Est.)	545	-	918	30	516	4,910	211	342	10,916	2,265	18,657
1978-Nov	33	*	16	*	*	65	15	3	231	117	713
Dec	194	*	355	17	255	1,792	81	139	4,219	143	4,870
1979-Jan	-36	*	2	*	*	3	*	*	-9	147	516
Feb	37	*	4	*	3	57	11	3	211	958	1,530
Mar	17	*	6	*	*	14	5	1	104	116	603
Apr	-2	*	11	*	2	23	5	4	121	116	664
May	39	-	12	*	*	74	14	3	232	154	755
June	215	-	405	17	263	1,937	47	160	4,429	118	4,931
July	-35	-	3	*	*	3	-1	2	-7	387	753
Aug	38	-	8	*	3	56	6	4	222	316	1,103
Sept	15	-	15	*	*	13	1	5	95	600	1,655
Oct	-19	-	24	*	1	20	9	4	114	138	722
Nov	53	-	23	*	*	74	261	3	531	121	1,052
Fiscal 1980 to date	34	-	47	*	1	95	269	7	645	259	1,774

Source: Monthly Treasury Statement of Receipts and Outlays of the United States Government.

Note: Budget estimates are based on the revision of the Mid-Session Review of the 1980 Budget released on July 31, 1979.

1/ Includes receipts from off-budget Federal agencies to the Civil Service Retirement and Disability Fund as of May 1974.

2/ Beginning fiscal 1974, includes adjustments of interest on public debt issue to convert to the accrual basis. Also includes Indian tribal funds, Interior Department, Judicial survivors annuity fund, State, foreign service retirement and disability fund, and Airport and Airway trust fund.

3/ Prior to January 1975, Rents and Royalities on the Outer Continental Shelf Lands were shown as proprietary receipts from the public for the Interior Department. To conform with the FY 1976 Budget Document's presentation, these amounts were reclassified and are now being shown as undistributed offsetting receipts. As a result, the detail will not add to the Fiscal Year 1974 totals.

* Less than $500,000.

Table FFO-5. - Budget Outlays by Function

(In millions of dollars)

Function	Fiscal 1979											F.Y. 1980			Comparable period fiscal 1979
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Cumulative to date	
National defense															
Outlays	9,437	9,307	9,438	8,838	10,166	9,430	10,047	10,050	10,405	10,727	9,228	10,587	10,842	21,429	18,737
Proprietary receipts from the public	-187	149	-134	-31	-8	20	-88	-79	-1	-72	-13	-150	-109	-259	-311
Intrabudgetary transactions	-10	-5	*	-3	1	-11	6	3	-6	2	-15	11	*	12	10
Total	9,239	9,450	9,304	8,803	10,159	9,439	9,965	9,973	10,397	10,657	9,200	10,448	10,734	21,182	18,437
International affairs															
Outlays	1,096	1,305	1,489	797	1,663	1,143	1,145	1,454	557	1,211	1,847	1,529	1,433	2,963	2,231
Proprietary receipts from the public	-1,143	-965	-939	-337	-767	-736	-402	-972	-985	-263	-1,014	-223	-244	-466	-1,891
Intrabudgetary transactions	-*	-*	-*	-*	-*	-*	-*	-*	-*	-4	-85	-43	-	-43	-63
Total	-47	339	550	460	896	407	743	482	-428	944	748	1,263	1,190	2,453	278
General science, space, and technology															
Outlays	412	407	421	422	465	256	442	461	433	504	965	452	515	968	780
Proprietary receipts from the public	-*	-*	-1	-*	-7	-*	-*	-*	*	-*	-*	-1	-*	-1	-1
Total	412	407	421	422	459	256	442	461	433	503	965	451	515	966	779
Energy															
Outlays	837	794	689	955	761	727	827	881	803	923	618	88	866	954	1,718
Proprietary receipts from the public	-51r	-46	-67	-51	-61	-62	-90	-92	-90	-135	-154	-36	-223	-259	-118
Intrabudgetary transactions	-	-	-	-	-	-	-	-	-	-	-5	-	-	-	-
Total	786r	747	622	904	700	665	737	789	713	789	459	52	643	694	1,600
Natural resources and environment															
Outlays	1,137	1,487	1,158	977	1,041	1,120	1,113	1,188	1,330	1,416	1,457	1,663	1,309	2,972	2,192
Proprietary receipts from the public	-234r	-353	-189	58	-175	-151	-136	-283	-169	238	-202	-216	-758	-974	-398
Intrabudgetary transactions	-7	-9	-16	-5	-11	-3	-8	-5	-8	-8	-21	-15	-12	-27	-14
Total	896r	1,125	953	1,030	855	965	969	900	1,154	1,646	1,234	1,433	538	1,971	1,780
Agriculture															
Outlays	1,396	1,669	1,761	756	502	524	46	-462	-350	-175	-178	475	703	1,178	2,323
Proprietary receipts from the public	-24	13	-6	6	-45	-22	23	-63	-19	-39	149	-73	66	-8	-2
Total	1,372	1,681	1,755	762	457	502	69	-525	-369	-215	-28	402	769	1,170	2,321
Commerce and housing credit															
Outlays	52r	311	111	-552	177	102	19	97	175	62	-44	2,080	223	2,305	2,165
Proprietary receipts from the public	-2	-2	-2	-2	-3	-2	-2	-2	-2	-3	-2	-3	-3	-5	-4
Intrabudgetary transactions	-*	-*	-*	-*	-*	-*	-*	-*	-*	-*	-*	*	-*	-*	-*
Total	51r	309	109	-553	174	100	16	95	173	59	-46	2,078	222	2,300	2,161
Transportation															
Outlays	1,424	1,378	1,425	1,108	1,256	1,257	1,332	1,343	1,556	1,713	1,595	2,031	1,699	3,731	3,124
Proprietary receipts from the public	-10	-4	-6	-13	2	-6	-5	-3	-4	-11	-4	-37	-30	-67	-14
Intrabudgetary transactions	-*	-*	-*	-*	-*	-*	-1	-*	-*	-1	-2	-72	-*	-72	-1
Total	1,414	1,374	1,419	1,095	1,257	1,251	1,326	1,340	1,552	1,702	1,589	1,923	1,670	3,592	3,109
Community and regional development															
Outlays	980r	843	794	609	828	651	857	852	784	977	896	943	942	1,885	2,078
Proprietary receipts from the public	-71	-81	17	25	-38	-19	-66	62	-63	-11	109	-311	35	-276	-219
Intrabudgetary transactions	-10	-9	-10	-8	-16	-30	-4	-2	-19	-34	-1	-2	-4	-6	-18
Total	899r	753	800	625	773	602	787	912	702	933	1,003	630	973	1,603	1,840

Footnotes at end of table.

Table FFO-5. - Budget Outlays by Function—Continued

(In millions of dollars)

Function	Fiscal 1979											F.Y. 1980			Comparable period fiscal 1979
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Cumulative to date	
Education, training, employment, and social services															
Outlays	2,246	2,209	2,470	2,076	4,587	2,595	2,560	2,193	2,473	2,647	2,349	2,331	2,333	4,664	4,390
Proprietary receipts from the public	-2	2	-2	-1	-8	-*	-1	-1	-1	-2	-8	-1	-3	-4	-2
Total	2,244	2,210	2,467	2,075	2,578	2,595	2,559	2,193	2,472	2,645	2,341	2,330	2,330	4,660	4,388
Health															
Outlays	4,492r	5,220	4,748	4,446	5,542	4,631	4,826	4,806	4,680	5,243	4,672	4,499	5,007	10,098	9,044
Proprietary receipts from the public	1	-5	3	-	-34	-1	-6	2	1	-6	3	594	-2	-*	-3
Intrabudgetary transactions	-550	-798	-602	-550	-1,277	-569	-561	-541	-573	-605	-566	-431	-555	-986	-1,072
Total	3,943r	4,717	4,149	3,894	4,231	4,060	4,258	4,268	4,108	4,632	4,109	4,662	4,449	9,111	7,969
Income security															
Outlays	12,383r	13,227	12,961	13,301	14,418	13,346	13,889	15,275	13,830	23,878	4,842	14,526	15,376	29,901	24,529
Proprietary receipts from the public	-*	-*	-*	-*	-*	-*	-*	-*	-*	-*	-*	-*	-*	-*	-*
Intrabudgetary transactions	-11	-759	-2	-2	-3	-30	-301	-1,681	-161	-219	-296	-48	-6	-54	-328
Total	12,372r	12,469	12,959	13,300	14,415	13,316	13,588	13,595	13,669	23,659	4,546	14,477	15,370	29,847	24,201
Veterans benefits and services															
Outlays	1,706	2,692	806	1,663	2,765	883	1,746	2,540	714	2,605	639	1,856	2,743	4,599	3,397
Proprietary receipts from the public	-39	-42	-49	-41	-48	-43	-51	-42	-48	-46	-40	-46	-41	-88	-82
Intrabudgetary transactions	-*	-*	-*	-*	-*	-*	-*	-*	-*	-*	-*	-1	-*	-1	-*
Total	1,667	2,650	757	1,622	2,717	840	1,694	2,497	667	2,559	599	1,809	2,701	4,510	3,314
Administration of justice															
Outlays	396	310	342	352	347	371	372	316	336	398	285	462	351	813	725
Proprietary receipts from the public	-4	-1	-1	-*	-1	-3	-7	7	-*	-1	-5	-2	-1	-3	-5
Intrabudgetary transactions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	392	309	341	352	347	369	364	323	336	397	281	460	350	810	720
General government															
Outlays	236	505	179	342	497	343	459	15	336	467	9,188	231	420	651	1,076
Proprietary receipts from the public	28r	-221	248	-21	-12	-18	5	-38	47	-22	-23	-15	-73	-87	35
Intrabudgetary transactions	-14	-15	-34	-21	-50	-20	-10	18	-17	-13	-8,833	-7	-5	-12	-23
Total	250r	269	392	300	435	305	454	405	365	432	333	209	342	552	1,088
General purpose fiscal assistance															
Outlays	160	79	1,754	81	67	1,752	160	76	1,800	53	131	1,842	7,233	9,075	9,056
Proprietary receipts from the public	-	-	-	-	-	-	-	-	-	-	-	-20	-	-20	-22
Intrabudgetary transactions	-	-*	-	-	-	-	-	-	-	-	-	-	-6,855	-6,855	-6,855
Total	160	79	1,754	81	67	1,752	160	76	1,800	53	131	1,822	378	2,200	2,179
Interest															
Outlays	3,932	7,797	3,973	4,189	3,695	4,122	4,340	8,199	3,930	4,385	3,994	4,295	5,122	9,417	7,319
Proprietary receipts from the public	-32	-144	-135	-88	-82	-100	-88	-79	-152	-119	-107	-188	-136	-324	-180
Intrabudgetary transactions	-50	-282	-798	-3	-6	-28	-11	-287	-287	-26	-68	-25	-267	-292	-459
Total	3,850	7,372	2,860	4,098	3,807	3,993	4,241	7,834	3,491	4,240	3,818	4,082	4,719	8,801	6,679
Undistributed offsetting receipts	-713	-4,870	-516	-1,530	-603	-664	-755	-4,931	-573	-1,355	-1,655	-722	-1,052	-1,774	-1,109
Net budget outlays	39,188r	41,392	41,095	37,739	43,725	40,752	41,618	40,617	40,482	54,279	29,625	47,907	46,841	94,649	81,932

Source: Monthly Treasury Statement of Receipts and Outlays of the United States Government.

* Less than $500,000. r Revised.

FEDERAL FISCAL OPERATIONS

Table FFO-6. - Investment Transactions of Government Accounts in Federal Securities (Net)

(In millions of dollars)

Fiscal year or month	Health, Education, and Welfare Department					Housing and Urban Development Department					Labor Department	
	Federal Old-Age and Survivors Insurance Trust Fund	Federal Disability Insurance Trust Fund	Federal Hospital Insurance Trust Fund	Federal Supplementary Medical Insurance Trust Fund	Other	Federal Housing Administration	Government National Mortgage Assn.		Federal Insurance Administration	Other	Unemployment Trust Fund	Other
							Participation Sales Fund	Other				
1971	1,274	1,263	377	244	-1	128	197	-6	14	2	-1,747	-*
1972	1,827	934	-146	221	-	109	-202	-8	1	5	-1,428	-*
1973	2,298	792	1,338	222	-*	31	299	-4	6	9	1,144	-*
1974	2,217	391	3,642	531	*	63	184	1	5	13	1,165	-
1975	2,175	-37	1,897	148	-	200	223	12	-8	8	-4,938	-
1976	-1,924	-1,227	1,181	-148	*	118	261	29	12	7	-2,373	7
T.Q.	-913	-477	67	14	-	28	27	2	2	-47	104	-1
1977	-1,645	-2,211	-36	988	1	190	-95	17	-3	-	1,073	-1
1978	-6,443	110	784	1,789	1	100	-313	37	-36	-	3,530	-*
1979	-3,638	1,230	1,406	953	1	146	108	45	10	-	4,276	-1
1980 (Est.)	-1,265	1,782	3,508	223	-	154	68	4	-13	51	3,300	-
1978-Nov	80	-167	-355	-37	-	5	52	-1	-	-	984	1
Dec	-1,155	319	510	358	*	24	-17	5	-	-	-496	13
1979-Jan	-1,296	-30	-79	212	*	11	15	2	-	-	-777	14
Feb	1,543	-5	12	10	-	46	12	3	-5	-	243	-6
Mar	-770	353	1,042	115	*	4	28	3	25	-	-1,042	-27
Apr	1,428	391	-130	53	-	-6	-38	1	-	-	529	-4
May	2,622	72	37	-26	-	5	51	6	-	-	4,007	-
June	-2,948	398	484	193	*	-34	-29	3	-	-	-633	-
July	-1,678	-185	-447	78	-	-5	-19	5	-	-	349	-
Aug	348	-294	411	31	*	60	16	4	-10	-	1,901	-
Sept	534	674	407	-36	-	51	33	6	-	-	-778	-1
Oct	-2,331	-163	-235	-41	*	-72	-1	6	-	-	39	-
Nov	1,558	-86	-267	-105	-	27	41	10	-	-	233	-
Fiscal 1980 to date	-773	-249	-502	-145	*	-46	40	16	-	-	272	-

Fiscal year or month	Transportation Department		Treasury Department	Veterans Administration		Office of Personnel Management	Federal Deposit Insurance Corporation	Federal Savings and Loan Insurance Corporation	Postal Service	Railroad Retirement Board	All other	Total
	Airport and Airway Trust Fund	Highway Trust Fund		National Service Life Insurance Fund	Other							
1971	-	1,033	1,380	83	20	2,932	180	196	-	-9	-145	7,417
1972	-	822	1,201	62	29	3,123	438	148	1,370	-110	26	8,420
1973	-	1,094	353	272	26	3,337	537	257	-280	24	67	11,821
1974	878	2,049	-566	178	30	3,669	225	378	-292	-60	110	14,813
1975	1,038	1,937	-920	111	27	4,635	404	316	-90	-290	165	7,031
1976	593	-505	56	215	42	5,253	470	368	125	-246	2,030	4,341
T.Q.	183	-79	40	25	*	-755	-128	135	599	-660	-1,682	-3,514
1977	534	1,127	525	219	40	7,428	855	424	-160	-171	145	9,243
1978	441	1,499	-282	268	54	7,134	569	404	450	-104	191	12,181
1979	691	891	2,511	207	33	8,220	1,220	489	518	-23	393	19,685
1980 (Est.)	773	1,162	-	197	37	8,898	1,192	506	-483	-30	709	20,770
1978-Nov	60	93	485	-22	-4	-305	131	110	-35	-1	-15	1,060
Dec	171	302	965	230	45	1,279	7	10	108	-53	12	2,599
1979-Jan	43	161	-38	-36	-9	-413	109	41	55	-328	72	-2,273
Feb	70	143	-1	-12	-4	-349	490	104	130	-11	-9	2,405
Mar	68	115	-3,123	-34	-5	-324	34	24	-226	-121	1	-3,858
Apr	62	66	2,722	-45	-9	-447	46	25	37	-323	28	4,387
May	69	168	-327	-25	-5	-274	148	12	-191	46	-1	6,368
June	217	468	416	232	45	1,377	-3	19	70	1,184	26	1,484
July	-80	-180	454	-22	-6	-479	9	30	44	-343	138	-2,338
Aug	47	-31	120	-24	-4	-338	192	100	-198	38	9	2,378
Sept	-73	-251	884	-18	-7	8,959	17	19	-1,182	-161	39	9,116
Oct	65	-415	221	-40	-6	-422	16	-22	1,711	-367	88	-1,968
Nov	95	-100	-30	-20	-3	-466	179	124	-67	273	20	1,418
Fiscal 1980 to date	160	-515	191	-60	-9	-887	195	102	1,644	-92	109	-551

Source: Monthly Treasury Statement of Receipts and Outlays of the United States Government. Budget estimates are based on the 1980 Budget of the U.S. Government, released January 22, 1979.

Note: Figures may not add due to rounding.
* Less than $500,000.

Table FFO-7. - Trust Funds Transactions October 1, 1979 through November 30, 1979

(In millions of dollars)

Classification (trust funds)	Receipts					Outlays										Excess of receipts, or outlays (-)
										Interfund transactions						
	Total in trust funds	Trust interfund and proprietary receipts 1/	Receipts of trust funds	Interfund transactions 2/	Unified budget receipts attributable to trust funds 3/	Total in trust funds	Trust interfund transactions	Proprietary receipts from the public	Outlays of trust funds	Federal payments and contributions	Federal employer contributions	Interest and profits on investments in Federal securities	Other	Total 4/	Unified budget outlays attributable to trust funds	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Federal old-age and survivors insurance	15,125	*	15,125	309	14,816	16,167	-	*	16,167	*	155	154	-	309	15,858	-1,042
Federal disability insurance	2,140	*	2,140	42	2,098	2,427	-	*	2,427	-	27	15	-	42	2,385	-287
Federal hospital insurance	2,994	*	2,994	52	2,942	3,711	-	*	3,711	-	37	15	-	52	3,659	-717
Federal supplementary medical insurance	1,477	*	1,477	994	482	1,707	-	*	1,707	986	-	8	-	994	712	-230
Federal employees retirement	1,367	*	1,366	795	572	2,349	*	-	2,349	3	651	96	44	794	1,554	-982
Federal employee life and health benefits	-	-	-	-	-	-57	-	-	-57	-	-	-	-	-	-57	57
Federal Deposit Insurance Corporation	-	-	-	-	-	-194	-	-	-194	-	-	-	-	-	-194	194
Airport and airway	296	-	296	4	292	145	-	-	145	-	-	4	-	4	141	150
General revenue sharing	6,855	-	6,855	-	6,855	1,716	-	-	1,716	-	-	-	-	-	1,716	5,139
Highway	1,234	-	1,234	48	1,186	1,742	-	-	1,742	-	-	48	-	48	1,694	-508
Black lung	112	-	112	50	62	122	-	-	122	-	-	50	-	50	73	-11
Military Assistance Advances	359	359	-	-	-	1,438	-	359	1,079	-	-	-	-	-	1,079	-1,079
Railroad Retirement	685	-	685	269	415	761	-	-	761	-	-	269	-	269	491	-76
Unemployment	2,524	-	2,524	34	2,491	1,570	-	-	1,570	-	-	34	-	34	1,536	954
Veterans Life Insurance	73	72	2	2	-	141	-	72	70	-	-	2	-	2	68	-68
All other Trust funds	181	141	39	29	10	122	-	141	-19	1	-	2	26	29	-49	39
Total	35,421	572	34,849	2,627	32,222	33,868	*	572	33,296	991	870	696	71	2,627	30,668	1,553

Source: Monthly Treasury Statement of Receipts and Outlays of the United States Government.

Note: The memorandum sections of various tables in the Budget of the U.S. Government present the trust fund receipt and outlay data on the same concept as colums (3) and (9) above. Trust interfund transactions are payments from one trust fund to another and are excluded in calculating trust fund receipts and outlays. The intragovernmental transactions are payments from Federal funds to trust funds, and vice versa, but exclude $12 million in trust payments to Federal funds.

1/ For content see columns (7) and (8).

2/ For content see columns (10)-(13).

3/ Includes net taxes and other receipts, mainly deposits by states and Federal employee retirement contributions.

4/ Excludes trust fund payments to Federal funds such as charge for administrative expenses of Social Security Act.

* Less than $500,000.